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ABSTRACT

This volume contains 20 case study profiles of educational RDD&E projects and, as such, constitutes the data base for the Oregon Studies. This part (Part 3) OF Volume IV contains profiles of five diffusion projects along with information that describes the development of the profiles, explains how to read the profiles, and includes a glossary of common profile terms. Each profile contains three sets of data: (1) descriptors of general project characteristics (2) descriptors of personnel working within the projects, and (3) descriptors of the work requirements within a project. The central data reported in a profile deal with project work requirements. In this regard, each profile describes the output of work effort; the standards established for those outputs; the operations required to produce outputs to specified standards; and the knowledges, skills, and sensitivities needed to carry out those operations. Related documents are EA 004 582-587 and EA 004 589. (Author/JH)

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THE OREGON STUDIES

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U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Office of Education
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RESEARCH DEVELOPMENT DIFFUSION EVALUATION

CASE PROFILES

VOL. IV
PART 3

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Edited by:
Harry L. Ammerman
Darrell Clukey
Gregory P. Thomas

EA 004 588

TEACHING RESEARCH
a division of the Oregon State System of Higher Education

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AN OVERVIEW OF THE OREGON STUDIES IN EDUCATIONAL RDD&E

In the spring of 1970 the Training Branch of the U.S. Office of Education, National Center for Educational Research and Development, annourced a plan to effect change in the preparation of educational RDD&E personnel. Two factors led to the announcement. The underlying factor was the rather dramatic emergence in the past decade of development, diffusion, and evaluation activities as vehicles for educational improvement, and the attending need for qualified personnel to carry them out. The precipitating factor, however, was evidence that in spite of an investment of approximately 30 million dollars by the Federal Government to help training programs become more responsive to the personnel needs created by these new activities, essentially the same number and kind of personnel were being prepared in 1970 as in 1965.

The plan for change reflected a strategy that can best be described as "beginning at the beginning." It incorporated three interrelated lines of activity: the creation of a conceptual and empirical base on which to build functional training programs; the design of more effective and efficient approaches to training; and the development of instructional materials that reflect desired changes in both content and procedure. The propositions on which the plan rested were straightforward: (a) little was known about educational development, diffusion and evaluation activities, or how they related to educational research; (b) even less was known about the training of personnel to carry out such activities; and (c) until both of these conditions were remedied the likelihood of designing effective and efficient programs to prepare personnel to carry them out was slight. The plan as a whole was coordinated so that the various activities within it would be developed with sensitivity to each other, and so that they would come together in completed fashion at approximately the same point in time. (For additional details on the plan for change see Chapter I in Volume I of the series reporting the Oregon Studies.)

The Oregon Studies, carried out by the Teaching Research Division of the Oregon State System of Higher Education, were to contribute in a beginning way to the conceptual and empirical base called for in the plan. As such they were to produce five products: a collection of detailed "case study" descriptions of projects that illustrated exemplary RDD&E activities within various educational contexts; a reliable, economically feasible methodology by which to collect the data needed to prepare the case studies; a conceptual system or framework for viewing the domain of educational RDD&E that could be used as a guide to the classes of data to be attended to in the case studies; cross-project analyses that highlighted the similarities and differences observed in the projects described, and that tested in rudimentary fashion the adequacy of the conceptual framework underlying those observations; and a compendium of the existing literature that pertained to either the nature of or the interactions between activities labeled educational research, development, diffusion and evaluation. These products are reported in five volumes:

Volume I.	Summary Report (with Technical Appendices)
Volume II.	The Literature of Educational RDD&E Part One (Research, Evaluation, and Development) Part Two (Diffusion & Combinations of RDD&E)
Volume III.	Conceptual Frameworks for Viewing Educational RDD&E
Volume IV.	Profiles of Exemplary Projects in Educational RDD&E Part One (Research and Evaluation) Part Two (Development) Part Three (Diffusion)
Volume V.	A Methodology for the Study of Educational RDD&E

Each volume in the series reporting the Studies has been designed to stand alone, but because each volume reports a different product, and each product can be understood fully only in relation to the other products, two "reader's guides" to the series have been prepared. The first involves brief summaries or abstracts of the contents of each of the five volumes in the series. These appear on the inside of the back cover of the volume, and are intended to serve as a guide or overview to the series as a whole. A more detailed guide is provided by Volume I. In addition to serving as a general summary of the Studies, it contains descriptions of the developmental histories of the products reported in the various volumes, the relationships that exist between them, and the manner in which they have interacted over time. Accordingly, for the reader who wishes to determine quickly what each of the five volumes in the series contains, turn to the inside of the back cover of the volume; for the reader who wishes to understand how the volumes relate to one another, follow that by reading Volume I.

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Final Report

Project No. 0-0701
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A project entitled "The Generation of information to Support Long-Term Manpower Studies of and Planning for Training Programs for Educational R, D, D, & E"

(Volume IV of five volumes)

THE OREGON STUDIES IN EDUCATIONAL RESEARCH, DEVELOPMENT, DIFFUSION, AND EVALUATION

VOLUME IV

PROFILES OF EXEMPLARY PROJECTS IN EDUCATIONAL RDD&E

Part Three of Three Parts
(Diffusion)

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May 1972

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ABSTRACT

This is one of five volumes reporting the results of the Oregon Studies in educational research, development, diffusion, and evaluation (educational RDD&E). It contains 20 case study profiles of educational RDD&E projects, and as such constitutes the data base for the Oregon Studies. The Volume is bound in Three parts. Part One contains profiles of five research and three evaluation projects; Part Two contains profiles of seven development projects; and Part Three contains profiles of five diffusion projects. Each part within the volume contains information that describes the development of the profiles, how to read the profiles, and a glossary of common profile terms. Each profile contains three sets of data: (a) descriptors of general project characteristics, e.g., objectives, timelines, organizational structures, and project "dynamics;" (b) descriptors of personnel working within projects, including background of training, work experience, and job role definition; and (c) descriptors of the work requirements within a project. Work requirement data include descriptions of the outputs that derive from a project, the standards held for those outputs, the operations required to produce outputs to the standards specified, and the knowledges, skills, and sensitivities drawn upon to carry out project operations. Nine hundred and sixty-two outputs of work effort were identified in the 20 projects. Two hundred and ninety-eight of these were analyzed for their work requirements. From this analysis 1148 descriptions of standards, 3722 descriptions of tasks, and 2974 descriptions of knowledges, skills, and sensitivities were obtained. One hundred and thirty-four professional persons were interviewed in collecting these data. The profiles are discussed in the preface to the volume from the point of view of their utility as scientific and training documents.

PREFACE

The present volume contains descriptive profiles of 20 educational research, development, diffusion, and evaluation (educational RDD&E) projects. The volume is bound in three parts. Part One contains profiles of 5 research and 3 evaluation projects; Part Two contains profiles of 7 development projects; and Part Three contains profiles of 5 diffusion projects. In addition, each part within the volume contains information that describes the development of the profiles, information that serves as a guide to reading the profiles, and a glossary of common profile terms. In combination, these materials should permit a reader to study the profiles with sensibility and understanding.

Each profile attempts to portray the essential characteristics of the project it describes and the realities of work requirements within it. Toward these ends, each profile describes: (a) the general characteristics of a project, e.g., objectives, timelines, organizational structures, and project "dynamics;" (b) the characteristics of personnel working within a project, including background of training, work experience, and job role definitions; and (c) the work requirements within a project.

The central data reported in a profile deals with project work requirements. In this regard, each profile describes the outputs of work effort, the standards established for those outputs, the operations required to produce outputs to specified standards, and the knowledges, skills, and sensitivities needed to carry out those operations. An overview of the data sets used to describe these variables and their interdependencies is provided in the reader's guide to the profiles. The rationale for and a full description of the data sets used is provided in Chapter 4 of Volume I of the series of volumes reporting the Oregon Studies.

The profiles were designed to serve the purposes of both science and training. In support of science the profiles serve three functions: (a) the careful description of phenomena of interest; (b) the development of a methodology by which to carry out such description; and (c) the development of a data base that permits parameter identification and comparative analyses. In support of training the profiles serve two functions: (a) they provide a means of gaining insight into the nature of and work requirements within individual educational RDD&E projects; and (b) they provide a means of gaining insight into the nature of and work requirements within the domain of educational RDD&E as a whole. Because these various concerns have combined to make the profiles as they are, each will be discussed briefly.

PROFILES AS BASIC SCIENCE DESCRIPTIONS. Individually and collectively the profiles provide accurate, reliable, and relatively exhaustive descriptions of ongoing RDD&E activities at the project level. All projects described are illustrative of the kinds of RDD&E activities likely to be funded in the decade ahead. The rationale for obtaining such descriptions involved a series of related propositions: (a) research, development, diffusion, and evaluation activities have served as powerful problem solving tools in a wide range of man's endeavors, e.g., medicine, agriculture, and industry, but as yet their systematic application within the context of education has been limited; (b)to have applicability within the context of education RDD&E activities must be adapted to fit particular demands of education; (c) to effectively bring about such adaptation, the demands of RDD&E within education must be understood; (d) at the time that the Oregon Studies were undertaken little was known about educational development, diffusion, and evaluation activities, about how such activities related to educational research, or about how any or all activities related to the improvement of education; and (e) in order to understand matters not understood it is wise to begin by describing them in detail. The rationale for reporting such descriptions in case profile format was less complex: It invited a more detailed description of project characteristics and activities than might otherwise be provided. This was assumed to be true for both the identification of the variables to be attended to in describing projects and the exploration of the interactions of those variables.

PROFILES AS METHODOLOGICAL PROVING GROUND. The decision to describe educational RDD&E projects in case profile terms required that a methodology be developed that would generate "case study" data. The development of such a methodology became a primary focus of the Oregon Studies, and the preparation of profiles was, to a large extent, a natural culmination of that focus. Two assumptions accompanied the emphasis on methodological development: (a) the Oregon Studies represented the first in a series of empirical studies to be undertaken on the nature of educational RDD&E; and (b) greater benefits would accrue to education over the long term by directing limited resources to the development of strong methodology than would accrue had the investment of resources been directed to the collection of large amounts of data with a weaker methodology.

As a proving ground for methodology, the profiles provided a basis for making two kinds of judgments: (a) judgment as to the sophistication of the methodology, i.e., the extent to which the methodology generates accurate, reliable, and reasonably exhaustive descriptions of educational RDD&E activities; and (b) judgment as to the robustness of the methodology, i.e., the extent to which the methodology can be applied to widely varying projects with equally productive results. Evidence as to sophistication was obtained by submitting completed profiles of projects to the directors of those projects for review and approval. In all cases the profiles met the criteria of sophistication outlined above (see the Notes on the Development of the Profiles for project director evaluations). Evidence as to robustness was obtained by applying the methodology to the 20 projects described in the present volume. These projects varied widely, and it was assumed that if the methodology was indeed adequate in terms of its robustness each of the 20 projects could be described with equal facility. It was also assumed that the data generated in relation to each project would be roughly comparable. As will be seen upon reading the profiles, those criteria have been met. An overview of the methodology is provided in the reader's Guide to the profiles. A detailed description of the methodology, as well as a description of the manner in which it evolved, is provided in Volume V of the series of volumes reporting the Oregon Studies.

PROFILES AS A DATA BASE FOR PARAMETER IDENTIFICATION AND COMPARATIVE ANALYSES. The decision to view the profiles as a data base for identifying or "mapping" the parameters of the domain of educational RDD&E emerged as a logical extension of the two previously discussed profile functions. Since extensive descriptive data on the nature of educational RDD&E were to be made available as a result of profile development, and since profiles were to be prepared for widely varying projects to test the robustness of a methodology, the selection of the projects to be described was approached from the point of view that they represent a sample of the projects that exist within the domain of educational RDD&E as a whole. Given the small number of projects that could be described in case study form with the resource base available, and given the variability that was to be reflected in those projects, no illusions were held about the representativeness of the sample that could be drawn. At the same time, it was reasoned that if the projects to be described sampled at all well the variability that existed in projects within the domain, the descriptions of those projects would provide at least a beginning base for sketching an "outline map" of the parameters of the domain. As an outgrowth of this kind of reasoning, it was decided that projects should vary systematically with respect to major sources of variability in educational RDD&E projects as a whole. Accordingly, the 20 projects described vary as to focus (research, development, diffusion, and evaluation), size (a funding base of less than $100,000 per annum, between $100,000 and $250,000 per annum, and over $250,000 per annum), and setting (public schools and state departments of education, colleges and universities, publicly funded laboratories and R&D centers, and privately funded R&D centers). A description of the procedures followed and criteria used in selecting the 20 projects is provided in Chapter 3 of Volume I of the series of volumes reporting the Oregon Studies.

As a data base for mapping the domain of educational RDD&E, the profiles actually serve two functions: (a) they provide a basis for mapping the parameters of the domain; and (b) they provide a basis for mapping the commonalities or central tendencies of the domain. As a basis for parameter mapping the profiles constitute an excellent source of data. Even though the project sample is small, and the absolute data base on which to prepare maps limited, projects have been selected so as to insure that they are reasonably representative of the range of projects to be found within the domain of educational RDD&E. Thus, the range of personnel employed in the 20 projects described, the range of project strategies followed, the range of organizational structures used, the range of outputs produced, the range of tasks performed, the range of standards held, and the range of knowledges, skills, and sensitivities drawn upon in their execution can be assumed to be reasonably representative of the range of such things to be found within the domain as a whole. The technical appendices that accompany Volume I of the series of volumes reporting the Studies summarize these data.

Given the sampling strategy that was followed, it is obvious that the profiles constitute a much weaker data base for mapping commonalities or central tendencies. Clearly, the sample was drawn to highlight the parameters of the domain rather than its central tendencies. Nevertheless, the data are amenable to central tendency analyses, and they were undertaken. The "outline maps" presented in Chapters 6, 7, and 8 of Volume I of the series of volumes reporting the Oregon Studies summarize these data.

PROFILES AS TRAINING AIDS. As the most detailed descriptions of ongoing RDD&E activities available, it was anticipated that the profiles could serve a valuable training function. Readers should find, for example, that they illustrate the nature of the work found within educational RDD&E projects, the nature of the tasks involved in carrying out that work, the knowledges, skills, and sensitivities needed to carry it out, the interpersonal and interagency dynamics involved in project operation, etc. Such information should be of value to students preparing to enter the field of educational RDD&E, staff who have just entered the field, or project directors who need to provide on the job training.

PROFILES AND CROSS PROFILE ANALYSES AS A BASIS FOR TRAINING PROGRAM DESIGN. By treating each of the 20 profiles as reliable descriptions of "what life is like" within the context of educational RDD&E projects, by treating the summated data as a trustworthy description of the range of project activities within the domain as a whole, and by having at hand whatever central tendency data that can be gleaned from the comparative analyses of projects, the designer of training programs should be in a position to make reasonably informed decisions as to what the focus and content of those programs should be. In combination these data begin to provide the designers of training programs with a sense of the arena within which educational RDD&E personnel must function, and with a sense of what has to be done to function effectively within that arena. Chapter 14 of Volume I of the series of volumes reporting the Oregon Studies spells out some of the implications that derive from these various data sources for the design of training programs.

A wide range of persons have been involved in the preparation of the profiles. In fact, nearly all persons involved in the Oregon Studies have contributed in one way or another, for essentially all activities undertaken within the studies have pointed towards profile production. Since other volumes detail the activities that have been related to profile development, e.g., the development of the methodology used to collect the data reported in the profiles (Volume V) and the development of the conceptual framework that guided the methodology (Volume III), the persons involved most directly in those activities need not be recognized here. Those who have been most directly involved in profile preparation do, however, and the purpose of the following paragraphs is to make that recognition public.

It is proper to acknowledge first those persons in the U.S. Office of Education who had the wisdom and courage to insist upon the development of case profiles, and their accompanying methodology, as the primary outputs of the Oregon Studies. In this regard the efforts of Ms. Cora Beebe and Drs. John Egermeier, Sue Klein, and Paul Messier deserve special recognition. So do the efforts of Dr. John Hopkins of Indiana University, the U.S. Office of Education's special consultant to the project. The contributions of these five people to the design and implementation of the case profiles and the supporting methodology have been of inestimable value. Also deserving of recognition is the role played in the project by USOE project officers. Their willingness to review projects to help in identifying those that appeared to meet the criteria for inclusion in the Oregon Studies was clearly beyond their established duties. My thanks to all in USOE who have given so much.

I wish to express my thanks also to the directors of the various projects for which case profiles were prepared, and to their staffs. It is not easy to give up as much as three days of time when conducting a major RDD or E project, or to release major staff members for as much as a day or a day and a half to do other than project work. Participation in the Oregon Studies represented a sizeable investment of these people's time and energy, and I wish to express my deepest appreciation for their willingness to make such an investment.

Finally, I wish to express my thanks to the staff of the Oregon Studies who were responsible for data collection, reduction, and profile preparation. Since so many have been involved, and in so many different ways, I will simply list names by activity. Thus, the task of refining the criteria for project selection, identifying projects that met those criteria, and making initial contact with those projects relative to participation in the study: the team of Mr. Steve Anderson, Mr. Darrell Clukey, Dr. Dale Hamreus, and Dr. Jim Nord; the task of making site visits for purposes of final project selection: the team of Dr. Harry Ammerman, Dr. Dale Hamreus, and Mr. Greg Thomas; the task of data collection, reduction, and initial profile preparation: Mr. Loring Carl, Mr. Norman Crowhurst, Mrs. Lee Green, Mr. Herb Hill, Mrs. Diane Jones, Dr. Rod Myers, Dr. Jim Nord, Mr. Dean Pielstick, Mr. Clark Smith, and Mr. Greg Thomas; the task of profile editing and refinement: Dr. Harry Ammerman, Mr. Loring Carl, Mr. Darrell Clukey, Dr. Kevin Morse, and Mr. Greg Thomas; the task of coordinating and scheduling the interview teams: Mr. Greg Thomas; the task of interview team training, and the task of administering quality control checks on all data reduction: Mr. Loring Carl and Mr. Clark Smith; the task of tracking all data from the time it came in from the interview teams until it was organized and presented within a completed case profile, including the task of editing each profile to assure consistency and quality: Mr. Darrell Clukey; the task of transferring the reduced data to computer storage, the preparation of computer programs for the analysis of the data, and the execution of those analyses: Mr. Bill Hickok; the task of overall activity coordination: Dr. Harry Ammerman.

My deepest thanks to all for tasks well done.

H. Del Schalock
Director of the Oregon Studies

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An Analysis of the Stability and Instability of Student Growth
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Herbert E. Hill

NOTES ON THE DEVELOPMENT OF THE PROFILES

Fourteen specifications guided the development of the profiles that appear in the present volume. Seven of the 14 pertained to the content of the profiles.

1. They were to accommodate widely varying data within a standard format, that is, a single format was to accommodate data emerging from an "evolving" case study methodology that was to be applied to projects of widely varying characteristics;
2. They were to convey both the "essential" features of a project (as opposed to every possible feature), and the "realities" of work within it;
3. They were to include a description of the context within which a project was operating;
4. They were to include both, but discriminate between, subjectively and objectively derived data;
5. They were to include the "raw" data from which categorized data emerged;
6. They were to highlight the training implications that emerged from the study of a particular project; and
7. They were to avoid description of the substantive content of a project, except as needed to understand a project within the context of the profile.

Four specifications pertained to the form of the profiles:

1. They were to preserve the anonymity of persons within projects;
2. They were to be candidly written, but without evaluative overtones and without reference to outside standards for comparative purposes;
3. To the extent possible, each profile was to make a unique contribution to the set of profiles (thus allowing individual differences between profiles with respect to degree of emphasis on various classes of data, depth of detail, etc.); and
4. They were to be readable and understandable by persons just entering the field.

Three specifications pertained to the means by which the profiles were prepared:

1. The profile design, and the linkage of that design to data, was to be such that persons relatively unskilled in professional report writing could, without elaborate training, assemble and prepare a profile;

2. Profiles were to be prepared and made available for review and/or use as soon as possible after the analysis of a project had been completed; and

3. Profiles were to be approved before publication by the directors of the projects described.

In sum the task of the Oregon Studies was to develop a procedure and a format for writing profiles that would display widely differing kinds of data from widely differing projects in a manner that would be easily understood, and that would allow for comparability across projects while retaining the ability to present characteristics idiosyncratic to individual projects. Furthermore the procedure and format were to accomodate the variability introduced in data by an "evolving" methodology, and were to be able to be applied by persons with little or no experience in formal report writing. The profiles reported in the volume meet or have met these specifications.

Procedurally, profile design progressed through six identifiable stages. The first stage occurred prior to data collection activities, and involved the outlining of alternative profile formats for anticipated data. These were prepared for conference review in conjunction with the first review of the proposed methodology (July 1970). In the second stage of development, alternative profile formats were prepared for a single project using trial data collected on that project. These were prepared for conference review in conjunction with the second review of the methodology (October 1970). It was through these two external review conferences that most of the specifications relative to the development of the profiles emerged.

The third stage in the evolution of the profiles involved the development of a format that accommodated both the specifications that had been developed, and the data that were by then emerging from application of the methodology. Four profiles were prepared according to this format, and submitted for conference review in conjunction with the third external review of the methodology. This was held in March 1971, and constituted the last formal review of the profile format. In all three of the external review sessions, participants included the consultants to the Oregon Studies, training program directors, U.S. Office of Education personnel, and the authors of the conceptual papers that appear in Volume III of the series of volumes reporting the Oregon Studies.

Following the March review, the profile format went through three additional "fine tuning" stages in its development. The first of these (Stage 4 in the development of the profile formats) incorporated both the recommendations received at the March conference and the subtle shifts that occurred in data collection strategy following that conference. Six profiles were prepared using this particular format. The next to last refinement in format (Stage 5) reflected the final refinement in data collection methodology, and was used in describing the remaining 10 projects analyzed. The final refinement in format (Stage 6) involved an internal review of the total set of profiles from the point of view of standardizing terminology, table headings, and category labels.

Because of the evolution of data collection methodology and profile format during the course of the Oregon Studies, it was not possible to achieve complete standardization across profiles. The first four profiles prepared contained data that were sufficiently different from the data reported in the next six, and the data reported in those six were sufficiently different from that reported in the last 10, that differences between the three sets could not be eliminated by the final refinement effort. As a consequence, the total collection of profiles reflect three recognizably different formats, as well as three slightly different data sets. All profiles contain the same basic chapter organization, however, and the same major headings within chapters, so differences between profile sets are minimal. The GUIDE TO READING THE PROFILES has been designed both to introduce the reader to the substantive content and organization of the profiles, and to place the differences in profile format in perspective. Chapter 4 of Volume I of the series of volumes reporting the Oregon Studies traces the implications of profile format differences for cross-project analyses.

A number of procedures were adopted as guides to the preparation of profiles. Profile writers were always members of the data collection team and they always knew in advance when they were to serve as writers. To insure consistency across writers, chapter titles, major headings within chapters, data tables and figures, and data sources were standardized. During the actual process of preparing the profiles, writers were instructed to make use of all record forms, tape recorded interviews, and data presentations. Debriefing sessions conducted with the members of the data collection team were held to further the writer's understanding of both the project as a whole and the data collected in relation to it.

Profile drafts were given substantive critiques by all members of the data collection team, and editorial critiques by at least two other Oregon Studies staff. Where extensive revisions were needed, the revised drafts were subjected a second time to a complete review and critique process. Upon completion, each profile was submitted for review and approval to the responsible officer of the project being described. The last five profiles submitted to project officers were accompanied by a profile rating sheet in order to obtain specific information as to their adequacy. The results of these ratings are summarized in Table 1.

TABLE 1

Frequency of Ratings as to Profile Adequacy
(N = 5)

Focus of rating	Rating Schedule A	Rating Schedule B	Rating Schedule C
1. Description of organizational structure	5	0	0
2. Description of organizational operations, interrelationships	4	1	0
3. Description of the ends being sought by the project	4	1	0
4. Representativeness of all outputs indexed (Ch. II)	3	2	0
5. Representativeness of the outputs analyzed (Ch. III)	4	1	0
6. Accuracy of the data presented on outputs (Appendix)	4	1	0
7. Overall representativeness of the Profile	4	1	0

Rating Schedule

Check box A, B, or C as follows:

A = Representative of a majority of operational concerns.

B = Representative of only a part of operational concerns (concerns of significant proportions omitted).

C = Major concerns not covered.

A GUIDE TO READING THE PROFILES

Since the profiles are relatively complex documents, and since they vary in format (see NOTES on the development of the profiles), a guide to their reading has been prepared. The guide is designed to orient the reader to (a) the classes of data reported in the profiles, (b) the procedures followed in collecting those data, (c) the trustworthiness of those data, and (d) the manner in which the data have been organized within the profiles. If used in conjunction with the NOTES on the development of the profiles and the GLOSSARY of profile terms that also appear in the volume, a reader should have no difficulty in making his way through the profiles.

Classes of Data Reported in the Profiles

As indicated in the preface to the volume three major classes of data are reported in each profile: (a) descriptors of general project characteristics; (b) descriptors of project personnel; and (c) descriptors of project work requirements. Work requirement data are reported both in terms of work activities associated with job roles and work requirements associated with project outputs. The data sets that comprise these various data classes are described briefly in the paragraphs that follow. The rationale for and full description of the data sets appear in Chapter 4 of Volume I of the series of volumes reporting the Oregon Studies.

Data Sets Used in Describing the General Characteristics of Projects

Five data sets are used to describe the characteristics of a project as a whole: (a) the objectives of, rationale for, and contributions to be made by a project; (b) the timelines established for completing work within a project; (c) the organizational structure within which the work of a project is carried out; (d) the political-institutional-intellectual context within which a project rests; and (e) the "dynamics" of project operation. The first three data sets are self-explanatory. Context data pertain to the relationship of the project being studied to its sister projects, to the activities of the administrative unit within which it rests, and to the broader political-institutional context within which it rests. These relationships are portrayed in the form of a "context map."

As used in the Oregon Studies, "project dynamics" is a catch-all term that involves information pertaining to procedures, feelings, patterns of behavior, or anything else that can be used to convey a sense of either the "essence" of or the "reality" of working within a particular project. The focus of that which is reported may be project operations, factors influencing project operations, and/or the consequences of project operations. Operationally, the data pertaining to project dynamics involves the pooled perceptions, observations, hunches, and insights gained by the staff of the Oregon Studies during the three to five day on-site visit required for project analysis.

No formal category sets have been developed for coding any of these data. All are reported in the form of narrative statements within the context of the case profiles.

Data Sets Used in Describing Project Personnel

Three data sets are employed in describing project personnel: (a) the background of training and work experience of professional staff; (b) a description of the job or jobs held by professional staff; and (c) the support services and resources available to staff in the performance of their respective job roles. All of the data within these sets are reported in terms of questionnaire items.

Data Sets Used in Describing Work Activities Associated With Job Roles

Two data sets are employed in describing work requirements associated with job role: (a) the perceived requirements associated with a particular job held; and (b) the emphasis given to various classes of work activities within the context of a particular job held. These data are also reported in terms of questionnaire items.

Data Sets Used in Describing Work Requirements Associated With the Production of Project Outputs

Four data sets are employed in describing work requirements associated with the production of project outputs: (a) the outputs of work effort per se; (b) the standards held for those outputs; (c) the operations required to produce specified outputs to specified standards; and (d) the knowledges, skills, and sensitivities required to carry out those operations. These are the primary data sets reported in the profiles, and as such they are far more complex and extensive than the other data sets reported.

In attempting to describe the outputs of projects, and the standards, operations, and enablers that relate to them, it was necessary to establish a number of category sets to handle the complexity that was found. Two approaches were taken to the development of these sets: (a) a conceptual-empirical (deductive) approach; and (b) an empirical-conceptual (inductive) approach. In the former, category sets were developed as an extension of the conceptual framework that guided the Studies;[1] in the latter, they were developed in response to the data emerging from the study of ongoing projects.[2] Operationally, however, the two approaches were complementary, for the conceptual-empirical approach yielded category sets that functioned as relatively broad, general organizers of the data, and the empirical-conceptual approach yielded category sets that functioned at a "close to the source," descriptive level. Figure 1 provides a summary of the conceptually derived sets used to organize information about project outputs, standards, operations and enablers. Figure 2 provides a summary of the empirically derived category sets used to organize the same information, that is, statements describing work requirements in the language of persons working in the field. The various primary and cluster categories that make up these sets, as well as the procedures followed in their development, are described in Chapter 4 of Vol. I of the series reporting the Oregon Studies. The number of data statements (interviewee statements) classified within these various category sets include 1148 that are

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[1] For a description of the conceptual framework that guided the empirical thrust of the Oregon Studies see Schalock, H.D. and Sell, G.R., "A Framework for the Analysis and Empirical Investigation of Educational RDD&E," in Chapter 4 of Volume III of the series of volumes reporting the Oregon Studies.

	OUTPUTS	STANDARDS	OPERATIONS	ENABLERS
STRUCTURE	Products Events Conditions	Output Process		Knowledge Skill Sensitivity
FUNCTION	Policy Setting Management Production			
CHARACTER	Knowledge Technology Implementation Information			
LEVEL	Focal Component Facilitating		Activities Tasks* Actions	

FIG. 1. Category sets used to describe at a broad, conceptual level the properties of outputs, standards, operations, and enablers.

*Of this set, only task level descriptions were obtained. Time and resources did not permit an analysis of operations at the level of actions, and the activities set was left to be derived empirically.

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[2] To some extent this is an over simplification, for the conceptually derived categories were tested empirically in the course of their derivation, and the empirically derived categories were always influenced by conceptual considerations. (See Chapter 2 in Volume I of the series of volumes reporting the Oregon Studies, or Volume V, for a discussion of the procedures followed in the development of the methodology.)

descriptive of output standards, 3722 that are descriptive of output related tasks, and 2497 that are descriptive of output related enablers.

	OUTPUTS IDENTIFIED	OUTPUTS ANALYZED	STANDARDS	TASKS	ENABLERS
Number of PRIMARY Categories Used to Classify Interviewee Statements	299	167	79	280	136
Number of CLUSTER Categories Used to Classify Primary Categories	51	46		20	

FIG. 2. Category sets used to describe at a "close to the source," empirically derived level the properties of outputs, standards, tasks, and enablers.

The Interdependence of Data Sets

As indicated in the preface, each case profile was to describe not only the variables listed in the preceding paragraphs, but their interdependencies as well. This in turn required that a way be found to collect data on those interdependencies. Accordingly, a schema was developed which placed the full set of variables within the context of an interacting whole. Within this context OUTPUTS were adopted as central, that is, all other data sets were linked to them. Procedurally, this required that outputs of work effort within a project be identified, a set of these be selected for analysis, and for each output analyzed establishing the STANDARDS set for its production, the OPERATIONS required for its production, the ENABLING KNOWLEDGES, SKILLS, and SENSITIVITIES needed for its production, the PERSONS involved in its production, and the RELATIONSHIP of that output to the other outputs involved in the work of a project as a whole. It was also possible to link a particular output to the organizational structure of a project, the context within which the project rested, and even the "dynamics" of a project, though not so directly as in the case of variables that depended upon output linkage for their definition. The interaction of these various classes of data is illustrated schematically in Figure 3.

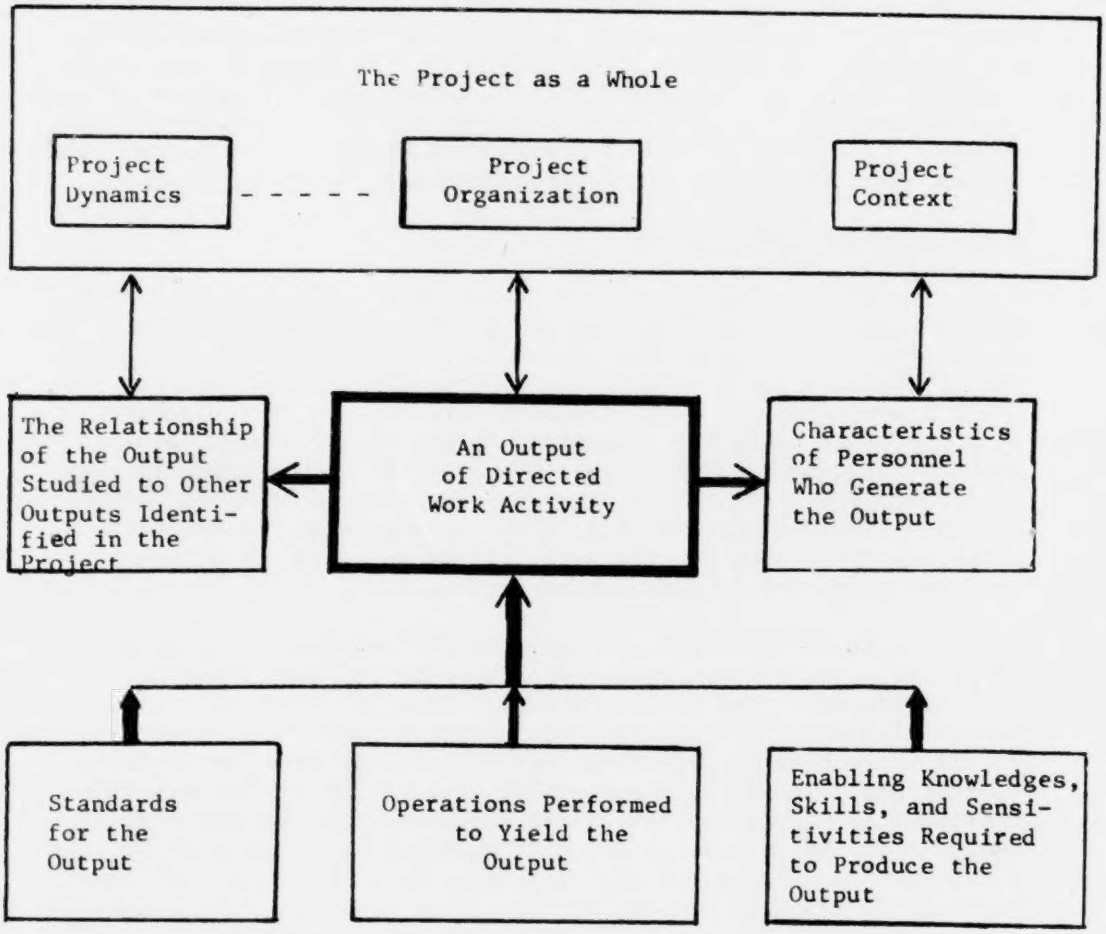
The Project as a Whole
Project Dynamics
Project Organization
Project Context
The Relationship of the Output Studied to Other Outputs Identified in the Project
An Output of Directed Work Activity
Characteristics of Personnel Who Generate the Output
Standards for the Output
Operations Performed to Yield the Output
Enabling Knowledges, Skills, and Sensitivities Required to Produce the Output

FIG. 3. Classes of information sought in describing a project, and their relationship to outputs of work effort.

Procedures Followed in Data Collection

Three relatively distinct procedures were employed in collecting the data reported in the profiles. By and large these corresponded with the three major classes of data collected. All data, however, were collected within the context of an "on-site" visit by a data collection team from the Oregon Studies. Depending upon the size and complexity of a project, teams consisted of from two to six people, and the length of the site visit extended from three to five days. An overview of the procedures used in collecting the various classes of data reported in the profiles is provided in the paragraphs that follow. Additional detail is provided in Chapter 4 of Volume I, and in Volume V, of the series of volumes reporting the Oregon Studies.

General Project Descriptors

Probably the best label for the procedures used in collecting data on general project descriptors is that of "non-obtrusive." The objectives of a project, the rationale for a project, project time lines, organizational structures, and the like, were obtained from project proposals and other documents descriptive of the project. Also, information on the "dynamics" of the projects were gathered through incidental observation, the recall of casual comments made by project staff while being interviewed, and the "hunches" or "insights" gained while working with project data. Almost without exception these sets of data were able to be collected without intrusion upon people's time and energy.

The one data set used to describe the general characteristics of projects that was intrusive was the data set that described the context within which the project rested. Some information of this kind was usually able to be gained from proposals and other documents, but in all cases project directors were interviewed when developing a context map. In some instances this amounted to little more than confirmation of information gained elsewhere, but in others it involved both the generation and piecing together of information about intra- and inter-institutional linkages that were simply not made explicit in existing materials. Generally speaking, the larger the project the more complex its political-institutional-intellectual linkages, and in some cases, for example the Children's Television Workshop, the development of a map to depict these linkages was a major undertaking.

Personnel and Work Activity Descriptors

All of the data that describe the personnel associated with a project, and all of the data that describe work activities associated with job roles, were collected through questionnaires. These were administered by members of the Oregon Studies staff, either while visiting the project site or through telephone. Three questionnaires were involved: (a) a general project questionnaire; (b) a job/task inventory; and (c) a general activities questionnaire. The data reported from the three questionnaires are referred to in the profiles as form 02, 03, and 04 data respectively. Copies of the three questionnaires may be found in Volume V of the series of volumes reporting the Oregon Studies.

Output and Work Requirement Descriptors

All data on outputs and work related to their production were collected through interview. The interview strategy called for: (a) identifying outputs associated with a project (an output index); (b) ordering those outputs according to their interdependencies (an output map); (c) selecting from the map those outputs for which work requirement data were to be obtained; (d) identifying persons most directly responsible for and/or most directly involved in the production of those outputs; and (e) interviewing those persons in relation to the standards held for the output being analyzed, the tasks required to produce the output, and the knowledges, skills, and sensitivities needed to perform the required tasks. The selection of outputs to be analyzed was done by the data collection team, on site, after an output map had been established and a sense had been gained as to the outputs that were most critical to the project. Persons interviewed provided information relative to his or her own contribution to the production of a particular output, as well as the contributions of others (a distinction between self-other data was maintained throughout the project.) As familiarity with a project grew, adjustments were made as needed in the output map, the selection of outputs to be interviewed around, and the matching of interviewees with outputs. All interviews were tape recorded, and all data were reduced from the recordings by the person who did the interviewing.

The reduction of the interview data involved a multistep process: (a) editing tapes to identify data statements within them, that is, statements pertaining to standards, tasks, and enablers; (b) the recapitulation, or "recapping", of data statements into a readable, grammatically correct form, that is, independent clauses and/or sentences (care was taken not to destroy the original language of the interviewees in this process); (c) the transfer of the recapped statements to color-coded summary sheets that corresponded to the various data sets being used; (d) the coding of the recapped statements by a two person coding resolution team (during this process the coding team was free to call upon members of the data collection team for statement clarification, interpretation, context building, etc.); and (e) the storage of the coded data in computer files in a way that permitted the interdependencies within the data to be maintained. A record of all steps in the data collection and reduction process was maintained from the time of first contact with a project until all data on that project had been computer stored and verified.

The Trustworthiness of the Data

Since the classes of data reported in the profiles were collected by various means, each must be considered separately as to its trustworthiness. Accordingly, the potential sources of error that reside within each data class, and the steps taken to control them, are reviewed in the paragraphs that follow.

General Project Descriptors

Four of the five data sets used to describe the general characteristics of projects made use of working documents. These included project objectives, timelines, organizational structures, and context maps. Typically, the document used had been prepared by project directors. To the extent that such documents can be accepted at face value, and to the extent that the Oregon Studies staff did not introduce error in reporting the substance of those documents, the data sets that made use of them were subject to few sources of error. As a consequence, no formal measures of trustworthiness were prepared for them.

Judgments relative to the trustworthiness of the data reported on project dynamics is another matter. It will be recalled that these data consist of the pooled observations, hunches, "insights," and choice tidbits of information gleaned by members of the data collection team from a wide variety of sources. It will also be recalled that these data intentionally were to be subjective and impressionistic. As a means of reducing gross error all final descriptions of the dynamics of projects were read and confirmed by all members of the data collection team that visited a project, but no formal measures as to the trustworthiness of such data were obtained. For purposes of profile presentation, however, the data on project dynamics are reported.

Personnel and Work Activity Descriptors

Since the data sets describing personnel and work activities were derived through questionnaire methodology they were subject to all the sources of error known to operate within that methodology, for example the error that is introduced through the selection of questions asked, the possibility of multiple interpretations of those questions, and the lack of opportunity to determine falsification or shoddiness of response to the questions. The steps taken to control these sources of error were of two kinds: (a) reasonable care in the development and testing of the questionnaires prior to their utilization for purposes of data collection; and (b) the administration of the questionnaires while the data collection team was on site. The first step involved a number of field trials of the questionnaires, and a number of revisions in them on the basis of those trials. The second allowed the questionnaires to be introduced within the context of the data collection effort as a whole, and within that context an opportunity to clarify troublesome questions about or within them. In combination, it is believed that these procedures sufficiently reduced the typical sources of error that enter the collection of questionnaire data that the data reported can be viewed with a fair degree of confidence.

Output and Work Requirement Descriptors

Just as the personnel and work activity data were subject to the error typically associated with use of questionnaires, the output and work requirement data, since it was collected through interviews, were subject to the error typically associated with interviews. Four sources of error have always been troublesome in this regard: (a) the selection of interviewees as data sources; (b) the information elicited from interviewees about work requirements; (c) the coding of the information obtained from interviewees; and (d) the storage, retrieval, and analysis procedures used in manipulating the coded data.[3] The procedures followed in the Oregon Studies to combat these sources of error are summarized in Table 1. Given the procedures followed, and the coding reliability obtained, it seems reasonable to view the output and work requirement data with a good deal of confidence.

Profile Organization

It will be recalled from reading the NOTES on the development of the profiles that three variations in profile format will be found in the present volume. These correspond to variations in the nature of the data collected at various points in the Studies, and represent one of the less fortunate consequences of the decision to emphasize methodological development (see Preface). Although the differences in the data presented in the three profile formats are not great they can be confusing to a reader when first encountered. The purpose of this section of the GUIDE is to introduce the reader to the general organization of the profiles, and to spell out how the two earlier profile formats (Formats 1 and 2) differ from the final format (Format 3).

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[3] When the profiles are being considered as a data base for cross-project analyses, other sources of error must be considered. Two critical sources are (a) the adequacy of the sample of projects drawn and (b) the adequacy of the sample of outputs selected for analysis within a given project. These are sources of error that relate to the generalizability of data, however, and are not of primary concern in considering the case profiles as descriptions of individual projects.

TABLE 1

Procedures Followed in Controlling Sources of Error In Output-Work Requirement Data

SOURCE OF ERROR	PROCEDURES FOLLOWED TO REDUCE ERROR
Interviewee Selection	Only staff intimately acquainted with or involved in the production of an output were selected for interview. The relationship of the interviewee to an output was always confirmed by the project director, the person to be interviewed, and the immediate supervisor of that person. Data reported by an interviewee on the work of others in relation to an output were noted and coded separately.
Data Generation	A structured interview procedure was used to obtain data on the standards, tasks, and enablers associated with a particular output. In the interview, standards were the first to be identified, followed by the tasks engaged in to produce the output to those standards, followed by the knowledges, skills, and sensitivities drawn upon in carrying out the tasks identified. Stylistic variations in interviewing were permitted so as to accommodate either interviewer or interviewee differences, but during the course of an interview all data sets were exhausted. (For a detailed discussion of interview procedures see Volume V of the series of volumes reporting the Oregon Studies).
Data Reduction	A carefully established set of procedures and decision rules were followed in "recapping" the interviewee statements, and in coding the recapped statements in terms of appropriate data sets. The recapped statements were first checked for their completeness and adequacy by the data coordinator upon the return of the data collection team from a project site. They were checked again by the coding team. Incompleteness, or error, or lack of clarity detected on either of these checks required that the recapped statements be revised until they were acceptable at both quality assurance checkpoints. To insure reliable coding, team coder agreements were calculated. Using the recapped statements in three case profiles as a base for calculating coder reliability, and separating first and second codings by a three month period, coding agreements for items in each data set, with one exception, ranged between .69 and .96. Reliability in coding task statements was .60. Detailed coder reliability data are reported in Chapter 4 of Volume I of the series of volumes reporting the Oregon Studies.
Data Storage and Retrieval	As soon as the recapped statements had been coded for a particular project the codes were forwarded to the data coordinator for a check of their completeness, and then forwarded to the coordinator of data storage and retrieval for transfer into computer storage. After storage, repeated checks were run to insure that the initial computer entries were correct, and the computer center manipulations over time had not destroyed or reordered the data as it was originally stored.

Profile Format 3

Ten profiles in the volume meet the most advanced format requirements.[4] These are profiles 1, 2, 6 and 7 in Part One of the volume; profiles 9, 10, and 11 in Part Two; and profiles 16, 17, and 18 in Part Three. As a set these profiles reflect the most advanced form of the data collection methodology, were the last to be prepared, and appear as the first profiles to be read in any of the three parts to the volume, as well as the first to be read in the Evaluation section of Part One. Also, all are organized into six chapters: an Overview; a Description of the Parameters of the Project; a Summary of Data; Supplementary Data; Project Dynamics; and Implications for Training. Each profile also contains an Appendix that houses the "recapped" data statements from which the output-work requirement data summaries have been prepared.

An overview of the contents of each chapter in the format 3 profiles follows. It will be seen from these overview statements that the three classes of data collected on a project are collapsed and/or integrated for purposes of their presentation within profiles.

CHAPTER I: OVERVIEW. This chapter provides the first view of a project as more than a title. It provides an orientation to the nature of the project, its goals, [illegible] its reasons for being, and serves as the framework into which the balance of the profile data are fit. Structurally, the overview chapter consists of the following parts:

(a) Synopsis of the Project
(b) Objectives, Rationale, and Significance of the Project
(c) Context in Which the Project Operates

Chapter I is generally not more than 6 pages in length, and it is designed as an "abstract" so that readers may determine whether they wish to read the profile as a whole.

CHAPTER II: PARAMETERS OF THE PROJECT. Chapter II emphasizes, and makes quickly available, a first set of "hard" data about a project. Standard sections include:

(a) Staff structure;
(b) Project roster;
(c) Index of outputs;
(d) Output map.

Staff structure data involves a description of the organizational structure adopted by a project, and how staff members are distributed within that structure; project roster data involves a description of the roles played and/or functions performed by personnel within the project; an output index is an annotated listing of the outcomes of work effort that project staff identify as critical to the success of the project;

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[4] Each profile is identified as to its format number on the back of the profile title page.

and an output map is a schematic portrayal of the interdependencies between project outputs. More is said about output maps later in the GUIDE.

CHAPTER III: SUMMARY OF DATA. In terms of the data sets described previously, this chapter would be more accurately titled "Summary of Work Requirements for Output Production." Three data sets are summarized in the Chapter: (a) the standards held for the production of an output; (b) the tasks engaged in to produce an output to the standards set for it; and (c) the knowledges, skills, and sensitivities required to perform those tasks. Each of these data sets is displayed in standard tables as frequencies of category citations. The narrative text of the chapter deals principally with the data displayed in the tables, and the interrelationships of those data.

CHAPTER IV: SUPPLEMENTARY DATA. The chapter on supplementary data varies to some extent as to the specific data it contains. In general, however, the following data sets are reported:

(a) Kinds of outputs generated at varying stages of project completion;

(b) The distribution of outputs by their alternative classifications, i.e., structure, function, character, and level;

(c) Summaries of staff backgrounds;

(d) Individual job descriptions;

(e) Interviewee responses to questionnaire items relating to position requirements, support resources, and project management;

(f) Interviewee responses to questionnaire items citing emphases given to various classes of work activities;

(g) The funding base of the project.

Tables of the data are provided when they serve to provide a focus to the discussion. Meaningful relationships with data reported in other chapters are also pointed out.

CHAPTER V: PROJECT DYNAMICS. This chapter, by design, is the least structured of the profile chapters. The purpose of the chapter is to round out the profile by reporting "impressionistic" observations about the project. The "data base" for the Chapter was the hunches, observations, insights, etc. gained by the data collection team during their three to five day stay at the site of the project. These impressions are reported in whatever sequence, form, and substance the profile writer considered best in calling out the significant and unique features of project operation. The freedom of the dynamics chapter to vary in focus and content was considered essential to extending the meaning of the data collected. It was also seen as essential to methodological development, for it served as the vehicle by which new data thrusts were identified for inclusion in the methodology.

The substantive focus of the comments included in most project dynamics chapters includes some subset of observations with respect to staffing patterns, project management structures and procedures, management "styles," project related commitments, substantive issues that arise within projects, affective issues, and agency interrelationships. The discussion of such observations is linked, when appropriate, to "hard" data. The tenor of the discussion is intended to be non-judgmental and instructive.

CHAPTER VI: IMPLICATIONS FOR TRAINING. In this chapter the knowledge gained about a project is assessed with respect to its implications for training. In this assessment the data reported in the profiles generally are treated very briefly, for it is assumed that the reader can draw his own conclusions from his reading. Instead, attention is directed to comments or recommendations made about training by project personnel, or which are implied by the nature of the data collected. The discussion frequently focuses on training needs mentioned by project staff in relation to problems or difficulties in the project. To this extent, the discussion tends to highlight areas of competence in which preparation was weak.

PROFILE APPENDIX. The last chapter in each profile is followed by an appendix that contains the "raw" data that is the basis for the coded data reported in Chapter III. The raw data consists of the paraphrased or "recapped" statements of interviewees that describe the standards, tasks, and enablers associated with the generation of outputs. Category code numbers are included with each statement to facilitate their location in the various tables presented in Chapter III. The importance of this appendix extends beyond its function as an aid to the reader, for it represents what is presumed to be one of the most meaningful forms in which the data collected in the Oregon Studies can be presented for purposes of training. Furthermore, the profile appendix is the only place where the raw data on standards, tasks, and enablers appear.

Profile Format 2

Six profiles in the volume were prepared according to the format that preceeded in time the format just described. These are profiles 3, 4,and 8 in Part One of the volume; 12 and 13 in Part Two; and 19 in Part Three.

The main differences between formats 2 and 3 lie in the language used to describe project outputs. In format 2 the language of output structure, function, character, and level was not in use, and the distinction between products, events, and conditions had not as yet emerged. In their place was a language of production and management "products," where products served as a loosely defined term to cover what subsequently was recognized as products, events, and conditions.[5]

These differences are reflected in the content of Chapters II and III of the format 2 profiles. In all other respects both the content and organization of format 2 profiles are consistent with those reported in format 3.

Profile Format 1

Four profiles reported in the volume were prepared according to the first profile format developed. These are profiles 5 in Part One of the volume; 14 and 15 in Part Two; and 20 in Part Three. Since the variation between formats 1 and 3 is considerable, differences will be traced chapter by chapter.

CHAPTER I. Same as in format 3.

CHAPTER II. In place of an output index and an output map there is (a) an index of production responsibilities, (b) a production responsibility tree, (c) an index of management responsibilities, and (d) a management network. These correspond to the output index and output map of format 3, and for purposes of data analysis were so treated, i.e., they were recoded using the data sets reported in format 3 profiles. In format 1, production responsibilities are treated much as products are treated in format 3, and management responsibilities are treated much as events and conditions are treated in format 3. The distinction management and production responsibilities, however, are carried into Chapters III and IV of format 1, causing two chapters in the profile to be devoted to work requirement data (such data are consolidated in Chapter III in format 3). As is the case in format 2 profiles, the language of output index and map, and the language of output structure, function, character, and level does not exist.

CHAPTER III. Entitled DETAILS ON EACH PRODUCTION RESPONSIBILITY, this chapter presents the data on standards, tasks, and enablers only for products pertinent to the contractual obligations of the project. The chapter also contains the recapped interviewee statements (in format 3 profiles they appear as an Appendix), as well as the category frequency data that are based upon these statements.

CHAPTER IV. Entitled DETAILS ON EACH MANAGEMENT RESPONSIBILITY, the chapter simply repeats the format of Chapter III.

CHAPTER V. Equivalent to Chapter IV in format 3.

CHAPTER VI. Equivalent to Chapter V in format 3.

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[5] Subsequent to the preparation of format 2 profiles, production and management "products" were reclassified into products, events, and conditions. Two purposes were served by this reclassification: (a) it eased the strain of what had come to be recognized as a forced classification; and (b) it enabled the data reported in these profiles to be used in cross-project analyses. The recoded data are reported in supplementary tables that accompany each format 2 profile.

CHAPTER VII. Equivalent to Chapter VI in format 3.[6]

Notes on Reading Output Maps

The output map found in each of the profiles contains a wealth of information about the outputs of the project under investigation. In order to extract all the information that a map contains it is essential that the rules guiding the construction of a map be understood.

The Purpose of the Map

The purpose of the output map is to present as simply and as clearly as possible the interrelationships that exist between the various outputs of a project. The desired effect of reading an output map is a "picture" of the project being discussed in terms of the dependency relationships among the outputs the project seeks to achieve.

The Elements in a Map

Figure 4 contains an illustrative output map. A number of elements can be identified within it: solid line boxes; labels; code symbols; horizontal lines; vertical lines; brackets; dotted lines; dotted line boxes; and vertical (long and short dash) lines. Each of these elements contributes to the total information contained in a map. The following paragraphs identify the information presented by each element.

Solid line boxes

Each solid line box represents a specific output that the project is seeking to achieve. If the box stands alone (is not connected to any other box by a line) one of two conditions exists: (a) the output is considered to have value, but is not related to any other output, or (b) the output index did not contain output identifications that allowed other outputs to be linked to it.

Labels

Final
Report

Within each box there is a label which is the descriptor of the output represented. The labels found in the box are the same ones used to describe a particular output throughout the profile.

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[6] Profile 14 was a transition profile, and is peculiar in that it incorporates the language of the profile 1 format but the organization of profile 2 and 3 formats.

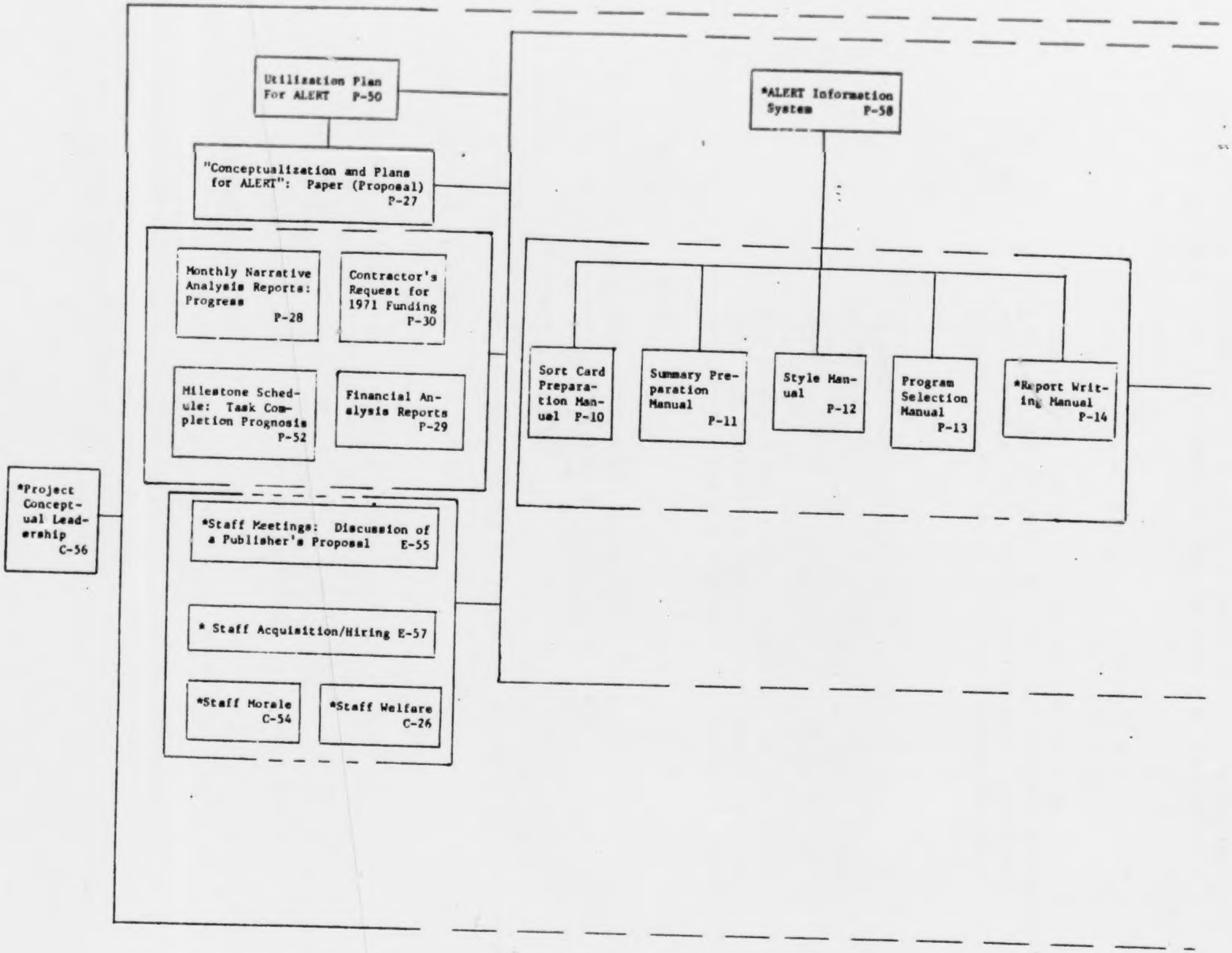
*Project Conceptual Leadership C-56
Utilization Plan For ALERT P-50
"Conceptualization and Plans for ALERT": Paper (Proposal) P-27
Monthly Narrative Analysis Reports: Progress P-28
Contractor's Request for 1971 Funding P-30
Milestone Schedule: Task Completion Prognosis P-52
Financial Analysis Reports P-29
*Staff Meetings: Discussion of a Publisher's Proposal E-55
* Staff Acquisition/Hiring E-57
*Staff Morale C-54
*Staff Welfare C-26
*ALERT Information System P-58
Sort Card Preparation Manual P-10
Summary Preparation Manual P-11
Style Manual P-12
Program Selection Manual P-13
*Report Writing Manual P-14

FIG. 4. An illustrative output map (overall project management and technology development).

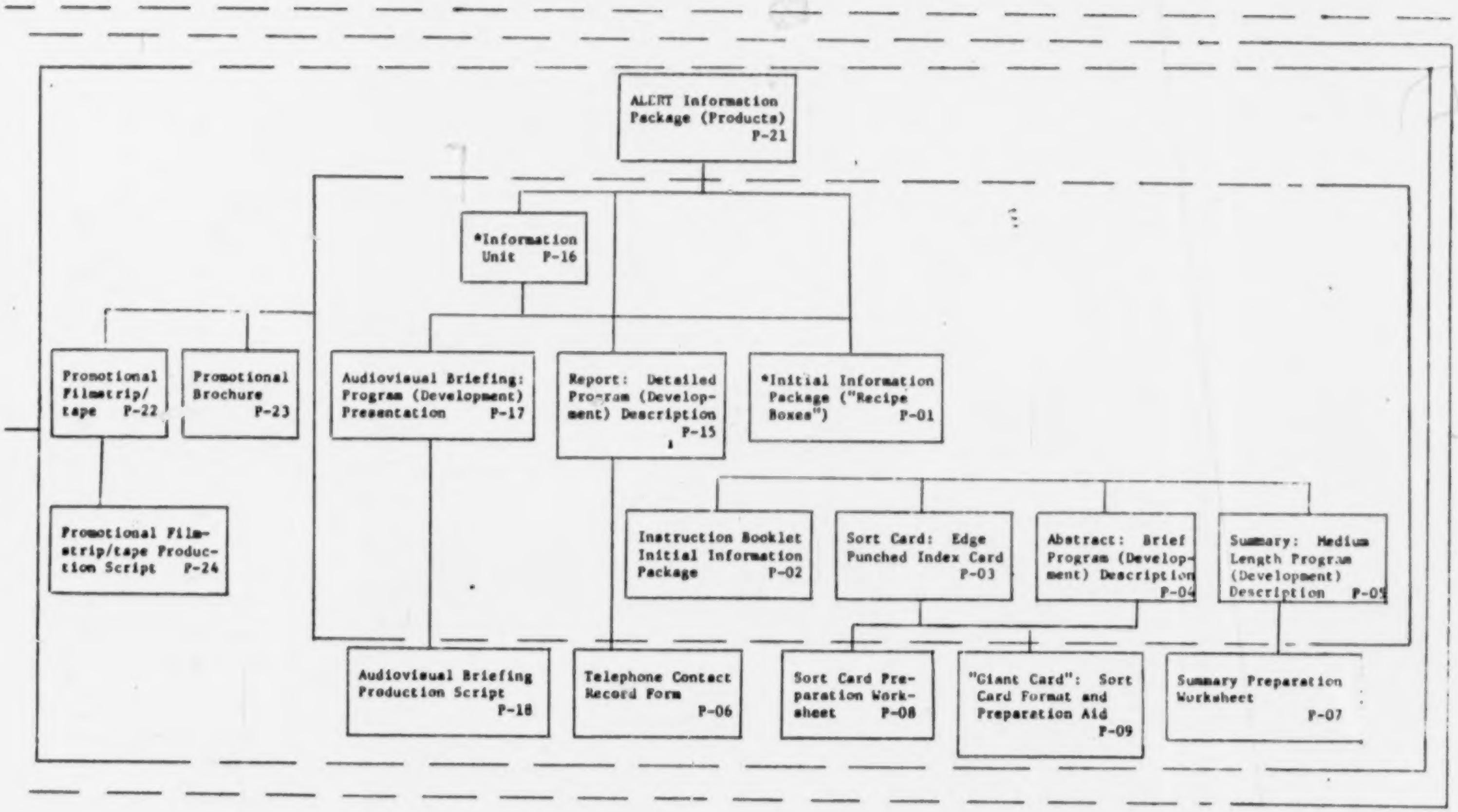
ALERT Information Package (Products) P-21
*Information Unit P-16
Promotional Filmstrip/tape P-22
Promotional Brochure P-23
Audiovisual Briefing: Program (Development) Presentation P-17
Report: Detailed Program (Development) Description P-15
*Initial Information Package ("Recipe Boxes") P-01
Promotional Filmstrip/tape Production Script P-24
Instruction Booklet Initial Information Package P-02
Sort Card: Edge Punched Index Card P-03
Abstract: Brief Program (Development) Description P-04
Summary: Medium Length Program (Development) Description P-05
Audiovisual Briefing Production Script P-18
Telephone Contact Record Form P-06
Sort Card Preparation Worksheet P-08
"Giant Card": Sort Card Format and Preparation Aid P-09
Summary Preparation Worksheet P-07

FIG. 4. Continued (information products development).

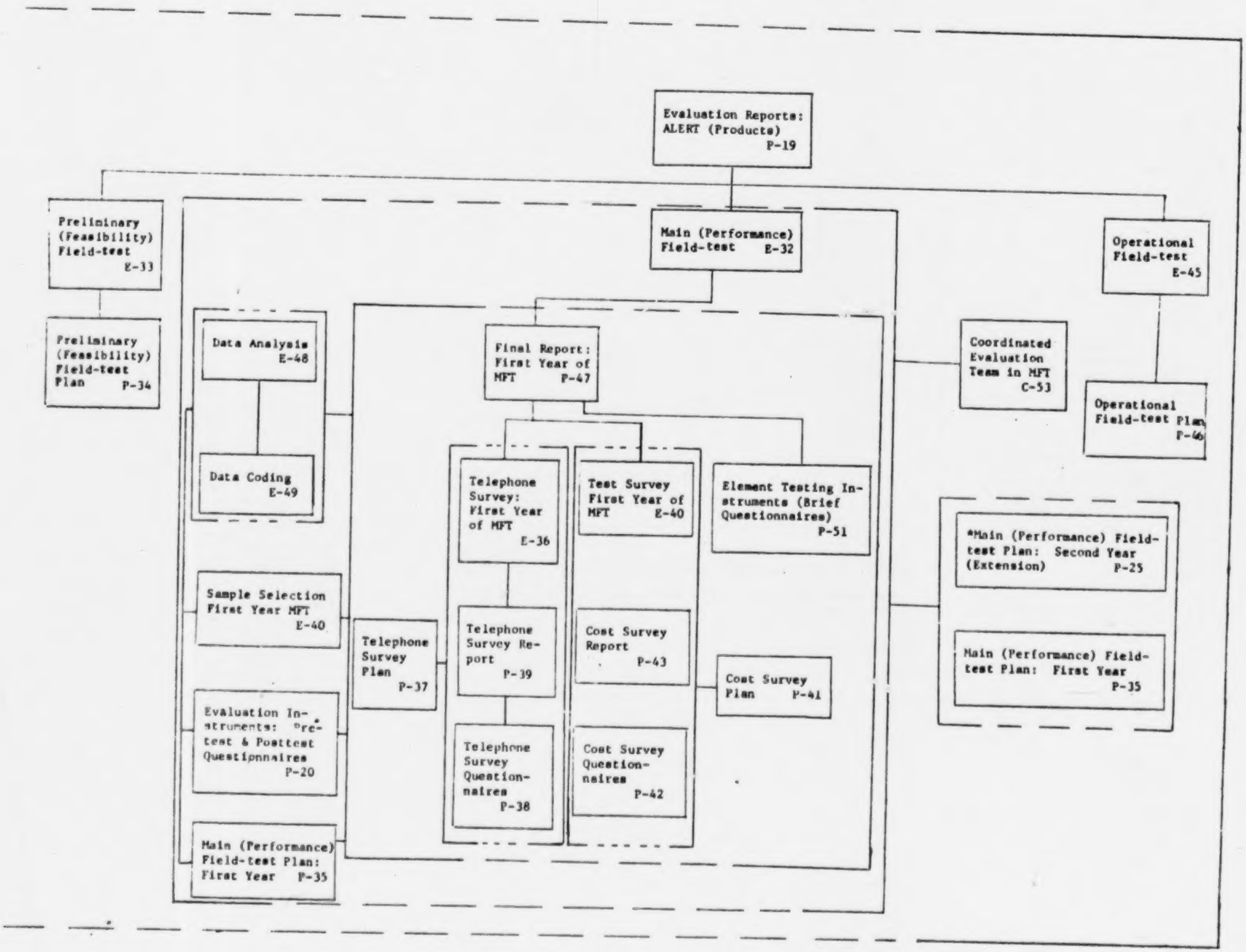
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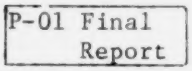
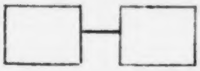
FIG. 4. Concluded (field-test evaluation of information products)

Coded symbol



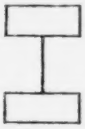
Each box contains, along with the label, a coded symbol. Each symbol is composed of a letter which identifies the structure of the output (P-product, E-event, C-condition), and a 2-digit numeral which identifies the output sequentially with respect to the other outputs in the same profile. Code numbers are the same throughout the profile.

Horizontal lines



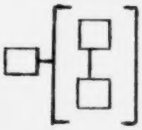
Horizontal lines between boxes indicate that the outputs so connected have side-effect relationships, that is, the production of one influences the other, and vice versa.

Vertical lines



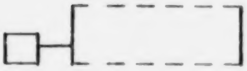
Vertical lines between boxes indicate that the upper output is dependent on the lower. Until the lower output is completed the upper one cannot be completed. In the total map, boxes connected by vertical lines are hierarchically arranged, those at the top of the map being dependent upon all those below.

Brackets



Boxes enclosed by brackets represent outputs which are influenced by, but not dependent on the output represented by the box linked horizontally to the bracket(s).

Dotted lines

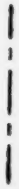


Dotted lines connecting two brackets are used to indicate outputs that are influenced by another output when the outputs encompassed by a bracket area are large in number, or when influence is carried across more than one page of the map.

Dotted line boxes

Dotted line boxes represent those outputs which are either generated outside the project, but influence it, or are outputs generated by the project as a function of other outputs but have not been indexed by project staff.

Vertical (long and short dash) lines



When more than one page is needed to display an output map, vertical lines (long and short dash) are used on the right of the first page and the left of the second page to indicate the point at which the two pages coincide.

Under unusual circumstances some outputs may appear more than once in a map. This results when they are related to other outputs in different ways, i.e., dependent on one set but influenced by another. When it is impossible to display both the relationships by one placement, outputs are repeated.

Once the purpose of an output map is understood and the various elements within it are defined, the reader should be able to extract a great deal of information from a careful analysis of a map. It should be made clear, however, that an output map does not attempt to display time relationships as do other process charts such as PERT. An output map focuses on the dependency relationships existing between outputs, independent of the factor of time.

GLOSSARY OF COMMON PROFILE TERMS

This glossary contains definitions of terms used frequently in the profiles. Asterisks identify terms that were used in the early forms of the profiles. These terms, no longer in use, are identified with a single asterisk to indicate their appearance in profile format 1 and a double asterisk to indicate their appearance in profile format 2. When terms are used in a definition that are themselves defined in the glossary, they appear in capital letters.

ADOPTION. A circumstance in which KNOWLEDGE, INFORMATION, and/or TECHNOLOGY is utilized.

CHARACTER OF OUTPUT. See Output Character.

COMPONENT OUTPUT. An outcome of work effort that constitutes an element of, or an approximation to, a FOCAL OUTPUT.

CONDITION. An outcome of work effort that creates a desired circumstance expected to endure over the life of a project, or as a result of it.

CONTEXT. See Project Context.

DEVELOPMENT. A problem-solving strategy designed to produce reliable technology, that is, procedures, materials, hardware, and organizational frameworks that have a known degree of success in bringing about a particular outcome or in performing a defined operation; also used to designate the focus of projects (see Project Focus) and the focus of outputs (see Output Focus).

DIFFUSION. A problem-solving strategy designed to bring about the implementation of generalizable knowledge, a reliable technology, or trustworthy information (as used here diffusion incorporates both the concepts of DISSEMINATION and ADOPTION); also used to designate the focus of projects (see Project Focus) and the focus of outputs (see Output Focus).

DISSEMINATION. A circumstance in which KNOWLEDGE, INFORMATION, and/or TECHNOLOGY is distributed to a targeted population.

EDUCATIONAL RDD&E. A coordinated set of problem-solving strategies designed to produce outputs that can be judged as to their quality and their contribution to the solution of educational problems.

ENABLER. KNOWLEDGES, SKILLS, and SENSITIVITIES needed to produce a particular output.

ENVIRONMENTAL MANAGEMENT RESPONSIBILITY.* Responsibilities which, when carried out, result in outcomes that enhance or facilitate the environment in which a project operates. (Subsequently, only the outputs of these responsibilities were analyzed.)

EVALUATION. A problem-solving strategy designed to produce trustworthy information regarding a phenomenon which occurs in a context or environment over which the user expects to exercise influence or about which he expects to make decisions; also used to designate the focus of projects (see Project Focus) and the focus of outputs (see Output Focus).

EVENT. An outcome of work effort that results in the occurrence of an observable transaction or set of behaviors.

FACILITATING OUTPUT. An outcome of work effort that supports the generation of FOCAL or COMPONENT OUTPUTS, but is not in itself a part of such outputs.

FOCAL OUTPUT. An outcome of work effort expected by contractual obligation to emerge from a project.

FOCUS. See Project Focus and Output Focus.

FUNCTION. See Output Function.

IMPLEMENTATION. A classification given an output of DIFFUSION, i.e., an instance of the ADOPTION and UTILIZATION of KNOWLEDGE, INFORMATION, and/or TECHNOLOGY; the objective of DIFFUSION.

INFORMATION. A classification given an output of EVALUATION, i.e., an instance of reliable information about a given phenomenon within a context over which a user expects to exercise influence or about which he expects to make decisions; the objective of EVALUATION.

KNOWLEDGE (AS ENABLER). A classification given an ENABLER that identifies it as a fact, principle, or generalization, and that can stand the test of empirical verification; also, any circumstance that can be shown to exist.

KNOWLEDGE (AS OUTPUT). A classification given an output of RESEARCH, i.e., an instance of established fact, principle, etc. that is generalizable and that can stand the test of empirical verification; the objective of RESEARCH.

LEVEL OF OUTPUT. See Output Level.

MANAGEMENT FUNCTION. A classification given an output that orchestrates the resources (time, personnel, materials, space, information) available to a project for the realization of the outcomes expected from it; also a report of that orchestration.

MANAGEMENT NETWORK (also MANAGEMENT RESPONSIBILITIES NETWORK).* A hierarchical ordering that graphically illustrates the functional relationships between MANAGEMENT PRODUCTS and RESPONSIBILITIES within a project. (Subsequently incorporated within output maps.)

MANAGEMENT PRODUCT.** A classification given a product serving a MANAGEMENT RESPONSIBILITY. (Subsequently identified as a product serving a MANAGEMENT FUNCTION.)

MANAGEMENT RESPONSIBILITY.* See Environmental Management Responsibility and Production Management Responsibility.

MANAGEMENT RESPONSIBILITY INDEX.* A listing of the MANAGEMENT RESPONSIBILITIES within a project. (Subsequently incorporated within the OUTPUT INDEX.)

OUTPUT. An identifiable outcome of targeted work activity that contributes to the realization of project goals.

OUTPUT CHARACTER. The attributes of an output that mark it as an instance of KNOWLEDGE, TECHNOLOGY, IMPLEMENTATION, or INFORMATION.

OUTPUT FOCUS. The attributes of a FOCAL OUTPUT that mark it as an output of RESEARCH, DEVELOPMENT, DIFFUSION, or EVALUATION. (In Format 1 and 2 profiles, all outputs are classified in terms of an RDD or E focus.)

OUTPUT FUNCTION. The attributes of an output that mark it as serving a POLICY, MANAGEMENT, or PRODUCTION FUNCTION.

OUTPUT INDEX. An annotated listing of the outputs of a project.

OUTPUT LEVEL. The attributes of an output that identify its relationship to project goals as FOCAL, COMPONENT, or FACILITATING.

OUTPUT MAP. A graphic portrayal of the functional interdependencies among the outputs of a project.

OUTPUT STANDARD. A criterion applied to, or level of excellence expected of, an output; a criterion by which the adequacy of an output is judged.

POLICY FUNCTION. A classification given an output that establishes standards or guidelines for a project.

PROCESS/OPERATIONS STANDARDS. A criterion applied to, or level of excellence expected of, the processes/operations engaged in in producing an output; a criterion by which the adequacy of processes/operations are judged.

PRODUCT. A tangible or "hard" outcome of work effort, concrete in form, and transportable at a given point in time.

PRODUCTION FUNCTION. A classification given an output that is a part of the total fabrication effort of a project.

PRODUCTION MANAGEMENT RESPONSIBILITY.* Responsibilities which, when carried out, result in outcomes that enhance or facilitate the generation of products for which the project is responsible. (Subsequently, only the outputs of these responsibilities were analyzed.)

PRODUCT TREE or PRODUCTION RESPONSIBILITY TREE.* A graphic portrayal of the functional interdependencies among the products of a project (equivalent to an OUTPUT MAP, except it contains only PRODUCTS).

PROJECT. A formally recognized, funded and directed effort aimed at achieving one or more specified ends that have their definition in educational RESEARCH, DEVELOPMENT, DIFFUSION, and EVALUATION.

PROJECT COMPLEXITY. A project dimension defined in terms of level of funding and duration.

PROJECT CONTEXT. A project dimension defined in terms of institutional setting, e.g., schools, colleges and universities, publicly supported laboratories and R&D centers.

PROJECT FOCUS. A project dimension defined in terms of primary emphasis of work effort, i.e., RESEARCH, DEVELOPMENT, DIFFUSION, and EVALUATION.

RESEARCH. A problem-solving strategy designed to produce reliable KNOWLEDGE, that is, facts, principles, theories, and laws that are generalizable and that can stand the test of empirical verification; also used to designate the focus of projects (see Project Focus) and the focus of outputs (see Output Focus).

SENSITIVITY. A classification given an ENABLER that identifies it as an increment of awareness about an environment or factors operating in or upon an environment; also, attitudes and personality characteristics.

SKILL. A classification given an ENABLER that identifies it as an ability, proficiency or expertness in the exercise of an art, craft, or science.

STANDARD. See Output Standard and Process/Operations Standard.

STRUCTURE OF ENABLERS. A classification given ENABLERS that identifies them as KNOWLEDGES, SKILLS, or SENSITIVITIES.

STRUCTURE OF OUTPUTS. A classification given OUTPUTS that identifies them as PRODUCTS, EVENTS, or CONDITIONS.

STRUCTURE OF STANDARDS.	A classification given STANDARDS that identifies them as OUTPUT STANDARDS or PROCESS/OPERATIONS STANDARDS.
TASK.	A unit of work performed in producing a specified OUTPUT to a specified STANDARD.
TECHNOLOGY.	A classification given an output of DEVELOPMENT, i.e., an instance of a plan, procedure or product that when applied can bring about a desired end with a known degree of reliability; the objective of DEVELOPMENT.
TREE.	See Product Tree.
UTILIZATION.	A circumstance in which KNOWLEDGE, INFORMATION, and/or TECHNOLOGY is employed in accomplishing a goal or end state.

CASE PROFILE 16

Written by

Herbert E. Hill
Diane G. Jones
Loring M. Carl

PROJECT TITLE: Alternatives for Learning Through Educational Research and Technology

(ALERT Project)

AN EDUCATIONAL RESEARCH PROJECT CONCERNED WITH: A technology for transforming information about empirically based educational developments into products suitable to the needs for school planners and decision makers.

A PROJECT OF: Far West Laboratory for Educational
Research and Development
One Garden Circle, Hotel Claremont
Berkeley, California 94705

This profile has been prepared according to

PROFILE FORMAT No. 3

Three profile formats are represented in this volume. The reader should refer to this number when making use of the reader's GUIDE to the profiles.

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Chapter I: Overview

This chapter is a brief introduction to the project "Alternatives for Learning Through Educational Research and Technology" (ALERT) conducted by the Far West Laboratory for Educational Research and Development (FWL).

Synopsis of the Project

Title: Alternatives for Learning Through Educational Research and Development.

Responsible Institution: Far West Laboratory for Educational Research and Development.

Funding Source: U.S. Office of Education, National Center for Educational Research and Development.

Funding Duration: April 1970 to June 1973. (38 months)

Observation Date: June 1971.

Present Stage of Development: Mid-Project

RDD&E Focus of Project: Educational diffusion.

Target Group of Project: Professional staff at elementary and secondary school level.

Expected Outcomes:
1. ALERT Information System.
2. ALERT Information Package.

Level of Funding and Duration: High-Medium (level 6 of 7 levels)

Agency Setting: Regional educational laboratory.

Staff Summary (at time of observation):

	Professional	Support
Total Full Time Equivalency (in man years):	3.50 (six interviewees only)	
Number of Personnel Assigned:	13	5 (clerical) 7 (technical)
Number of consultants:	1	
Number of Doctorate Degrees:	5	
Number of Master's Degrees:	7	
Number of Bachelor's Degrees:	1	

Major Area Specialities of Professional Staff (for six interviewed staff members only): social psychology, communications research, special education, French, English/writing, and psychology.

Objectives, Rationale, and Significance of the Project

The general objective or purpose of the ALERT Project is the development of an information diffusion system. The system is being derived empirically by field-test evaluation of both the system outputs and the system technology.

The goals of the system outputs, as conceived by the project developers, reside in the facilitation of rational decision-making by the user. The user is seen as any "decision-maker" in the school from the administrator to the community spokesman, including the student. The performance goals, as stated by the developers, are:

1. To increase the users' awareness and knowledge of alternative products and programs (developments) that have been demonstrated to increase children's opportunities to learn.
2. To provide users with available facts, trends, classification schemes, and criteria needed to comprehend these developments.
3. To encourage the users to apply this knowledge to their local situation by rationally deciding whether to adopt, reject, or adapt these developments.

The goals of the system technology are to eventually place in the hands of a publisher or another agency/client, an empirically evaluated technology for the efficient collection and accurate and objective processing of information about educational developments.

ALERT is built on the identified need to fill the gap between the developer and the practitioner. It is stated by the developers of ALERT that "most of the information about educational developments does not exist in forms that are easily retrievable, intelligible, and applicable for school personnel" and that "school personnel generally are not prepared to make effective use of the existing information and resources."

The products of ALERT are oriented around subject area developments at the elementary and secondary school level. The information is both global and detailed enough to allow the user flexibility and range of choice in use. In addition, the comprehensive coverage of a subject in one or a few readily available packages is also important to the practitioner who is seen as having little time for extensive personal research of a development.

ALERT is also seen as a complementary information system to both the ERIC (Educational Resources Information Center) information system and PREP information packages. In both cases it is characterized as providing information at a level or in a format that facilitates practitioner use.

The development procedure or strategy of ALERT is twofold. First is the planning, designing, prototype production, field-test evaluation, and revision of multimedia, multilevel, mailable materials that go to the practitioner/user. Second is the definition and development, field-test evaluation, and revision of the technology, necessary to produce packaged information that can be delivered to other agents to continue the work. The general developmental strategy of FWL is outlined in more detail in Appendix B.

Context in Which the Project Operates

Figure 1 illustrates the contextual influence and relationships that play a significant role in the ALERT Project. The following discussion is a brief exploration of those influences and relationships as identified in observation of the project.

Relationships to other agencies. The ALERT Project resides in the Communication Program (Division) of FWL. The primary relationships of the project with agencies outside the Laboratory are those with funding source agencies, field-test site agencies (schools), and product distributing agencies.

The U.S. Office of Education (USOE) is the primary source of funds for this project, as well as for the whole Laboratory. A basic contract through the Laboratory with the National Center for Educational Research and Development (NCERD) within USOE is the primary source of money for the ALERT Project. Additional funds are available in three contracts through the National Center for Educational Communication (NCEC), also in USOE. These contracts are treated as separate project contracts, but they are coordinated within the ALERT Project work and will feed into ALERT. These contracts were identified as PREP packages on Evaluation, Early Childhood Education, and Drug Education. Thus, the work in ALERT is funded by NCERD through a basic contract and NCEC through three project contracts.

The current year (1970-71) field-testing in ALERT is being accomplished in approximately 75 to 100 site schools in five states. This includes districts as well as specific schools. After an information product of ALERT was placed in the schools, liasion was maintained and various evaluation instruments administered by the evaluation team. Most of this is done by mail. This current field-testing is a main or performance field test, the second of a three-stage testing cycle. The schools that participate in the field testing may or may not participate in the full three-stage cycle. All information products in development are distributed only by the project. Once developed into a form for release, they are available for general distribution.

Two distributors,Technicon and EPIE, are currently responsible for general distribution of the two ALERT Information Units in

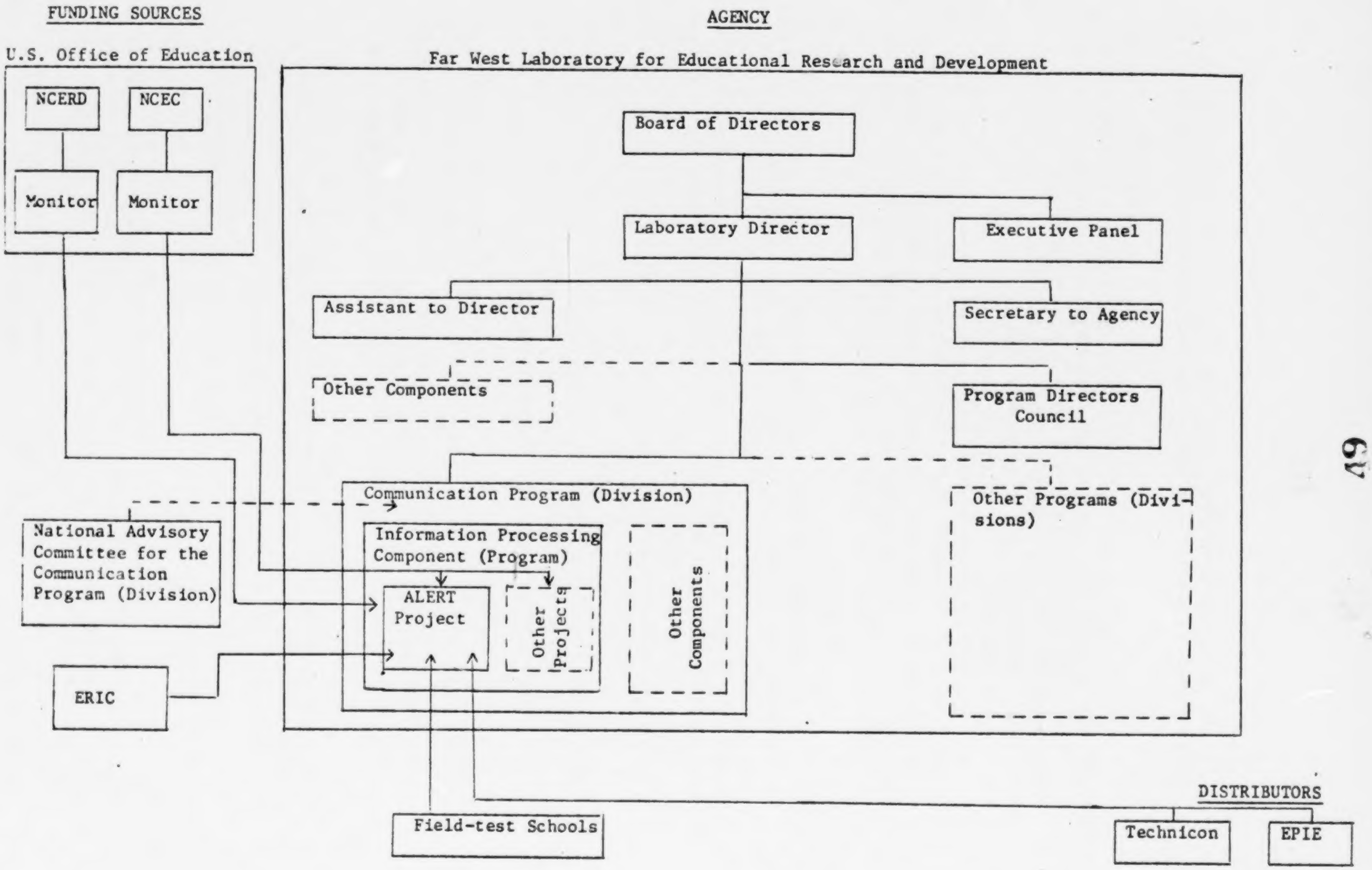
FUNDING SOURCES
U.S. Office of Education
NCERD
NCEC
Monitor
Monitor
AGENCY
Far West Laboratory for Educational Research and Development
Board of Directors
Laboratory Director
Executive Panel
Assistant to Director
Secretary to Agency
Other Components
Program Directors Council
Communication Program (Division)
Information Processing Component (Program)
ALERT Project
Other Projects
Other Components
Other Programs (Divisions)
National Advisory Committee for the Communication Program (Division)
ERIC
Field-test Schools
DISTRIBUTORS
Technicon
EPIE

FIG. 1. Contextual map.

release form. These two units are the Elementary Science Information Unit, distributed by both Technicon and EPIE, and The Social Studies Information Unit distributed by Technicon.

Relationships within the parent agency. The most significant direct relationship of the project identified within the agency, and specifically within the Information Processing Component (Program) of The Communication Program (Division) was that of coordination of the three NCEC contract projects within ALERT which were mentioned previously. The Programs (Division) within the agency function almost exclusive of each other. The Program Directors Council, which is responsible for setting program (Division) level policy, does bring together the program interaction. Of course other specific relationships with the agency that directly or indirectly effect the ALERT Project, such as policy setting by top management, certainly do exist. However, such relationships were not identified during the observation of the project.

One of the primary and direct influences within the agency that affects the ALERT Project is the general developmental strategy of the Laboratory as a whole (see Appendix B). This strategy has been directly adopted for the development of ALERT.

Other relationships. A significant relationship for the Communication Program (Division) that indirectly affects the ALERT Project is that with the National Advisory Committee for the Communications Program (Division). A similar committee exists for each of the four programs fo FWL. These committees are staffed by two members from the Executive Panel, an advisory group in the FWL management structure, and three to five members who are nationally prominent within the area of concern of the particular program. This committee reviews plans and goals of the program while surveying and interpreting national trends relevant to the program.

Another relationship that serves ALERT directly is that with ERIC. In the information collection process of ALERT, ERIC is used as a source of input. This relationship is apparently not of a special nature, however, questions as to how these sources might be coordinated into a comprehensive "practitioner-oriented information system" are also dealt with.

Time lines. Time lines were not available to the observation team. The Project Director indicated that a master schedule for ALERT did exist. However, it was emphasized that this schedule was plotted on a time line per task, showing a sequence of critical events at the task manager's level only.

The ALERT Project as a second generation information system and as an integrated work effort has been in existence about one year. The estimates for complete development of the ALERT information system range from three to five years.

Physical/environmental setting. The offices of the Communication Program (Division) are located in downtown Berkeley. The main offices of FWL are located some distance away, but also in Berkeley. The Communication Program occupies part of the first floor and all of the third floor of the building in which it is located. Most all the tasks necessary to the ALERT Project are being carried out within these offices.

Chapter II: Parameters of the Project

This chapter discusses the staffing pattern of the project, includes a roster of staff, describes the outputs being generated, and shows the dependent relationships of the outputs in an output map.

Project Structure

Staff **structure**. As illustrated in Figure 2, the essential elements of the staff structure in this project is a four level structuring of personnel, which is oriented upon task-focused teams. The project was recently reorganized to allow the diffusion of some authority and responsibility from the Component Director downward into junior staff or task managers. This was to provide a participative management structure that could improve communication along the vertical dimension. Also, this restructuring anticipates a general Laboratory reorganization in which Programs will take on a Divisional status and Components will probably take on Program status. The restructuring within the project has also altered the nature of the teams significantly.

Each team was originally, and to an extent still is, focused on a subject area. These teams tended to be fixed and were usually made up of one to three people plus the team leader. The subject area of a team might be English and language arts, or science and mathematics, or the team might be concerned only with evaluation or production. In a sense, each team is a department.

This structure still exists to an extent. However, superimposed upon it is the task-oriented team structure. Here one or more teams are organized to work on a task such as production of an information unit, or production of sort cards, etc. Unlike the team leader, the task manager is responsible for his own budget, time lines, expenditure graph, and monthly reports. The task manager is also usually responsible for more people and, in a sense, is a short-term project manager. The task-focused teams tend to be much more flexible both in numbers on team and duration than the subject-focused teams. The tasks cut across the subject areas and draw upon people in these areas as needed. Thus, the task managers must also negotiate for personnel.

At the time of observation both team structures were operating. Some transitional conflicts were noted. Staff at the team or task level, in some cases, indicated some confusion with their new roles and a lack of preparation for assuming some of their new responsibilities.

The Component or Project Director, at the time of observation, was acting (interim) director and had been with the project less than one year. A permanent director was due to assume his responsibilities shortly after our observation of the project. During this time the Program (Division) Director was strongly influencing the directions and management of the project.

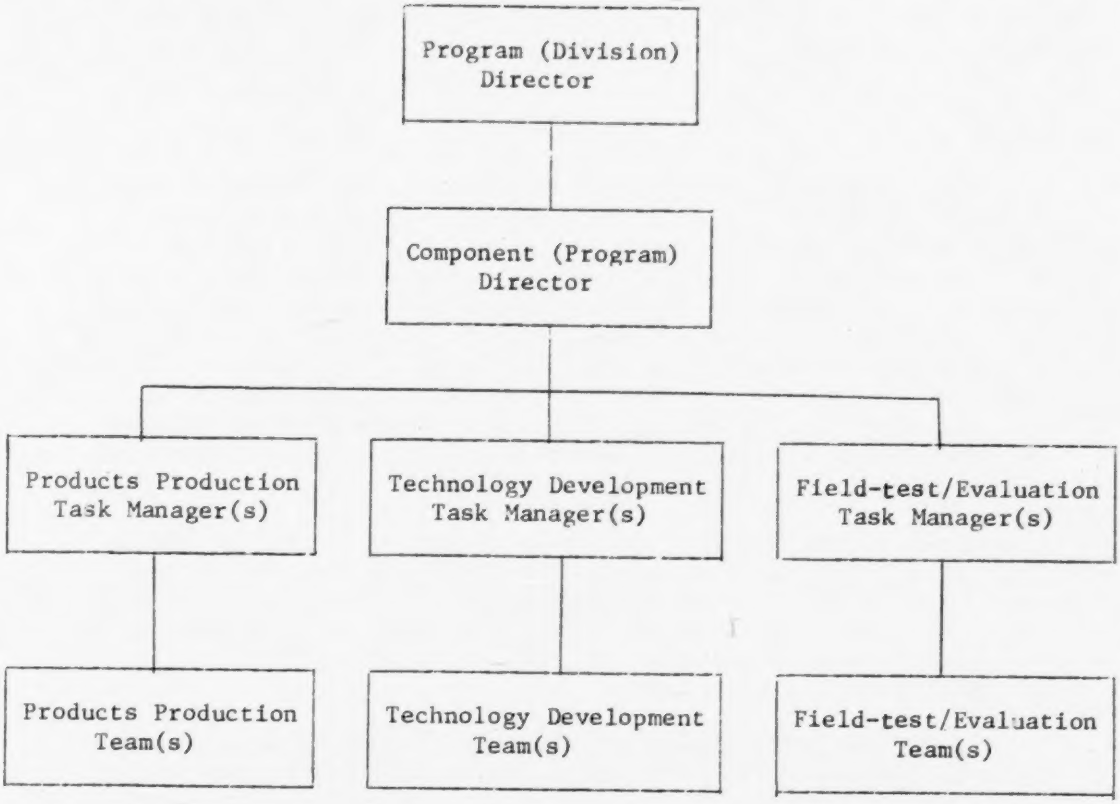
Program (Division) Director
Component (Program) Director
Products Production Task Manager(s)
Technology Development Task Manager(s)
Field-test/Evaluation Task Manager(s)
Products Production Team(s)
Technology Development Team(s)
Field-test/Evaluation Team(s)

FIG. 2. Project staff structure.

Project roster. The following staff members were interviewed for information about the project and selected outputs.

Titles and primary responsibilities of project personnel	Outputs around which staff member was interviewed
1. Program (Division) Director: Responsible for providing program level supervision and leadership to the project. (.10 FTE)[1]	C-56.[2] Conceptual Leadership for Project C-54. Staff Morale
2. Senior Program Associate I (Acting Project Director): Responsible for middle level project management and supervision including planning, maintaining general budget, maintaining general time lines, monitoring task level budgeting and work progress, and answering legal responsibility for project. (.75 FTE)	P-14. Report Manual (for Writers) E-57. Staff Hiring C-26. Staff Welfare P-58. ALERT System C-54. Staff Morale
3. Senior Program Assistant II (Task Manager): Responsible for budgeting, scheduling, coordination, and monitoring of work of writing team(s) as well as writing and editing project materials. (.90 FTE)	P-01. Initial ALERT Packages. (Recipe Box) P-14. Report Manual (for Writers)
4. Senior Program Assistant II (Evaluation Team Leader/Manager): Responsible for budgeting, scheduling, coordination, and monitoring of work of evaluation team. Other duties include writing reports, preparation of data collection instruments, supervision of data collection, and preparation of evaluation plans. (.80 FTE)	P-25. 2nd Year Main (Performance) Field-test Plan for ALERT C-54. Staff Morale E-55. Meeting of ALERT Staff to Discuss a Publisher's Proposal
5. Senior Program Assistant I (Task Manager): Responsible for planning and coordinating writing team(s)' work, monitoring progress, maintaining budget, assisting in design of questionnaires, surveying project related literature, and writing reports and project materials. (.20 FTE)	P-16. Information Units

---

[1] Full Time Equivalency

[2] An arbitrary code number (see "Index of outputs").

6. Program Assistant II (Writer/Editor): Responsible for coordinating efforts with one assistant in update of the Elementary Science Information Unit including writing and editing, reporting to task manager, and locating new developments in the field. (.75 FTE)	P-14. Report Manual (for Writers) P-16. Information Units

Two program staff members, one that was formerly full time on this project but at time of observation was working on another project, and a second in another component of the Communication Program, were interviewed to collect contextual and interrelationships information about the ALERT Project.

The total project staff for ALERT numbered about 25 at the time of observation.

Outputs Generated

During the observation and interview period on the ALERT Project, significant outputs[3] were identified and formal interviews were conducted around selected ones. Those project personnel who were linked to selected outputs were interviewed about their roles in generating the output. These outputs are annotated and summarized in the following section.

Index of outputs. Ten outputs of 57 identified (see Appendix A) were interviewed around. An arbitrary identification number has been given to each and is composed of two parts: (a) a letter which permits easy identification of the output as either a product (P), condition (C), or event (E)[4], and (b) a sequence number for all outputs irrespective of P, C, or E. These outputs are as follows:

P-01. Initial ALERT Package (Recipe Box). A box of edge-punched sort cards each briefly describing an educational development program. In addition to the sort cards the package includes instructions and guides for its use.

---

[3] An identifiable and significant planned outcome (product, event, condition) of targeted work activities, with targeted work activities being actions directed toward the realization of projected goal states.

[4] Product - A tangible or "hard" outcome of work effort that survives in a form that is transportable, such as a report.

Event - An outcome of work effort that results in the occurrence of an observable transaction, such as an interview.

Condition - An outcome of work effort that results in the creation of a desired circumstance, such as fiscal responsibility.

P-14. Report Manual (for Writers). Guidelines for preparation of ALERT reports.

P-16. Information Units. An information package, usually describing five to eight exemplary development programs in a selected subject area. The unit may contain summaries or survey level information, audiovisual briefings, and detailed reports per each program presented.

P-25. 2nd Year Main (Performance) Field-test Plan for ALERT. Procedures for field-test data collection and analysis extended from the initial one year plan.

C-26. Staff Welfare. The assurance and monitoring of staff productivity and communication.

C-54. Staff Morale. The maintenance of a mutually participative staff.

E-55. Meeting of ALERT Staff to Discuss a Publisher's Proposal. An event within the duration of the project at which the senior and junior staff evaluate a submitted proposal.

C-56. Conceptual Leadership for Project. The condition of well defined conceptual directions, supervision of such, and stimulation of staff to build on initial conceptualization.

E-57. Staff Hiring. An event involving the identification of a need for additional personnel, dissemination of position vacancy information, and selection of qualified applicants.

P-58. ALERT System. A manual information diffusion method.

Output map. Figure 3 represents the dependency relationships of the 57 identified outputs of this project. This representation is not necessarily sequenced over time. Those outputs interviewed around are identified in the map with an asterisk.

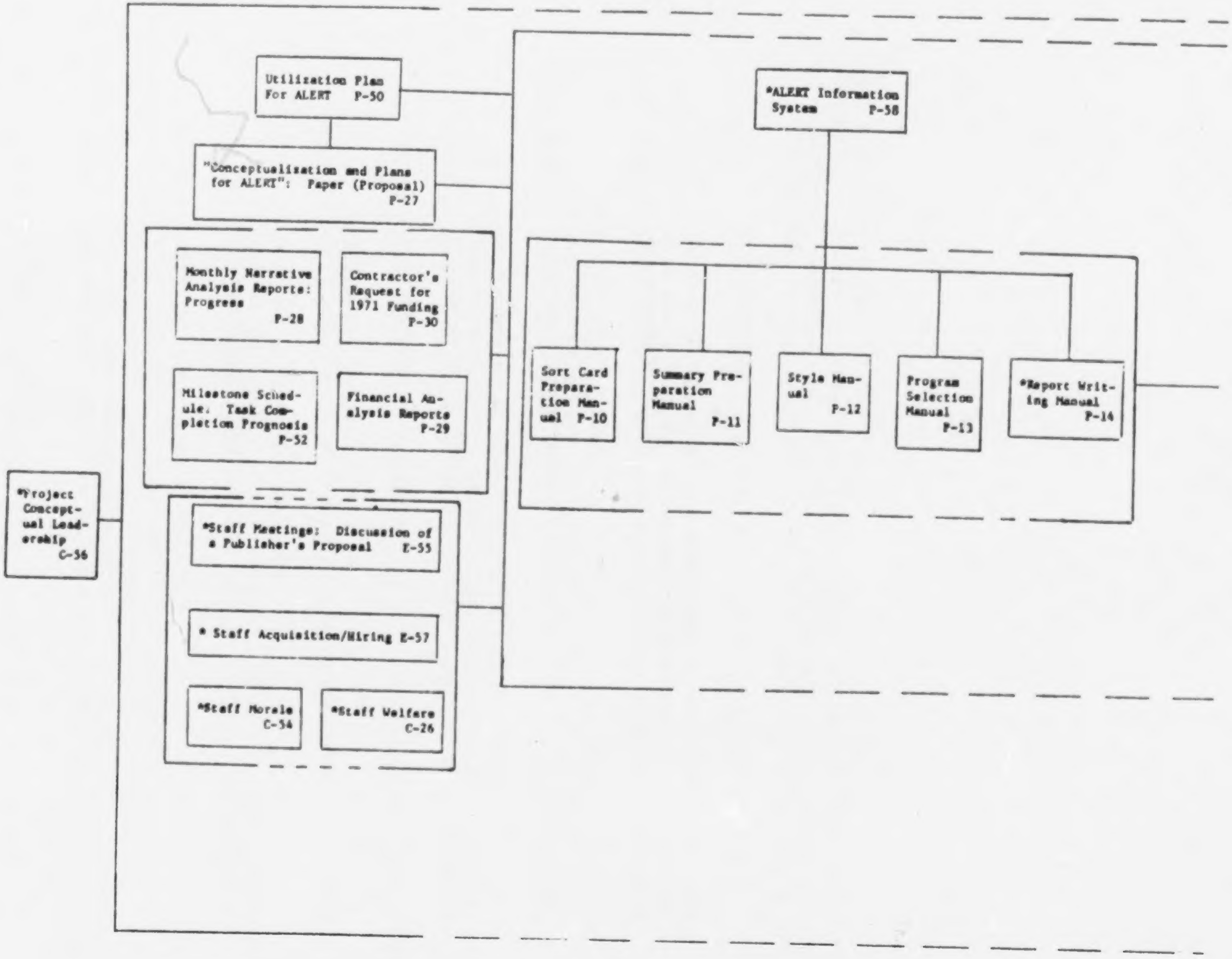
*Project Conceptual Leadership C-56
Utilization Plan For ALERT P-50
"Conceptualization and Plans for ALERT": Paper (Proposal) P-27
Monthly Narrative Analysis Reports: Progress P-28
Contractor's Request for 1971 Funding P-30
Milestone Schedule: Task Completion Prognosis P-52
Financial Analysis Reports P-29
*Staff Meetings: Discussion of a Publisher's Proposal E-55
* Staff Acquisition/Hiring E-57
*Staff Morale C-54
*Staff Welfare C-26
*ALERT Information System P-58
Sort Card Preparation Manual P-10
Summary Preparation Manual P-11
Style Manual P-12
Program Selection Manual P-13
*Report Writing Manual P-14

Fig. 3. Output map.

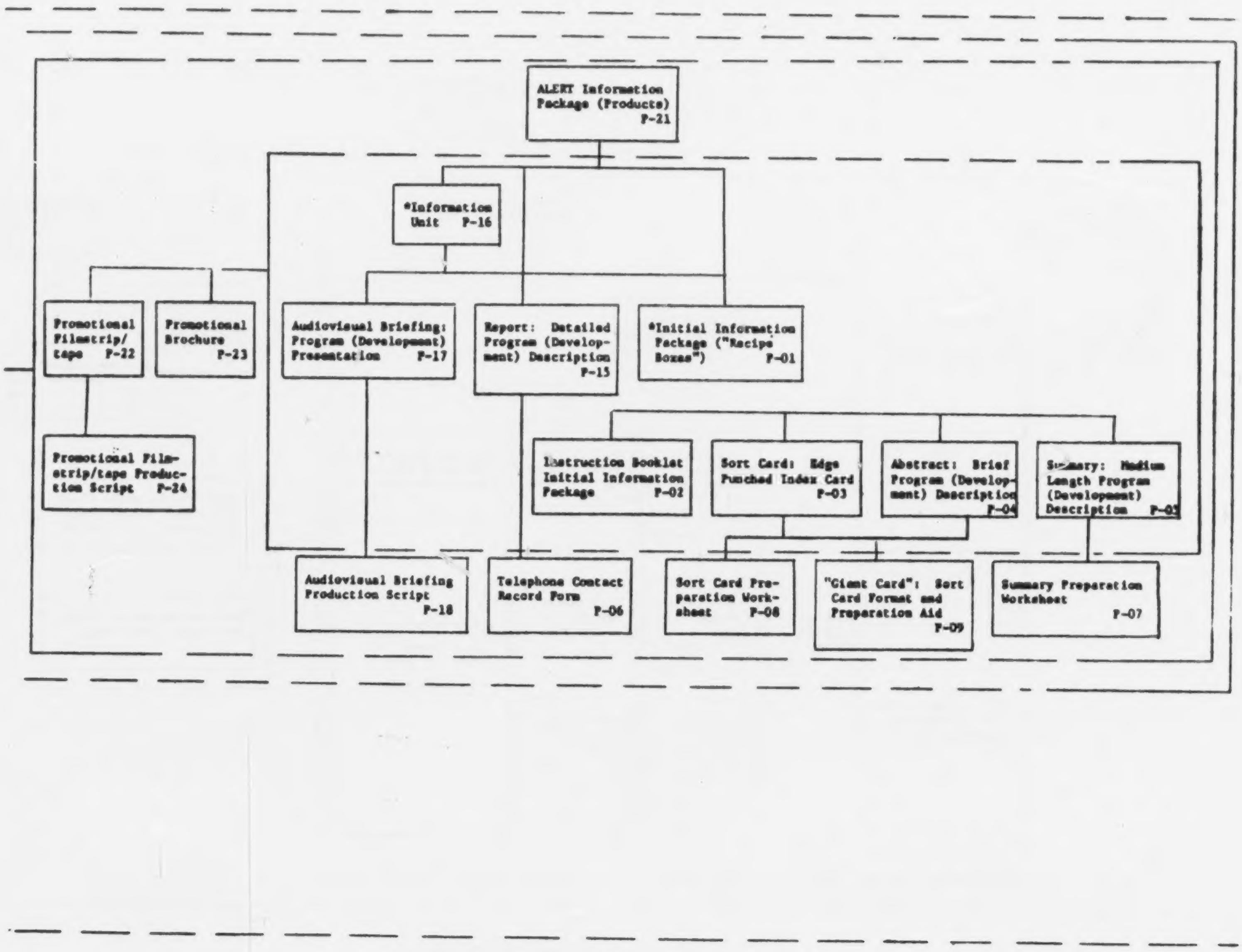
ALERT Information Package (Products) P-21
*Information Unit P-16
Promotional Filmstrip/tape P-22
Promotional Brochure P-23
Audiovisual Briefing: Program (Development) Presentation P-17
Report: Detailed Program (Development) Description P-13
*Initial Information Package ("Recipe Boxes") P-01
Promotional Filmstrip/tape Production Script P-24
Instruction Booklet Initial Information Package P-02
Sort Card: Edge Punched Index Card P-03
Abstract: Brief Program (Development) Description P-04
Summary: Medium Length Program (Development) Description P-05
Audiovisual Briefing Production Script P-18
Telephone Contact Record Form P-06
Sort Card Preparation Worksheet P-08
"Giant Card": Sort Card Format and Preparation Aid P-09
Summary Preparation Worksheet P-07

Fig. 3. Output map continued.

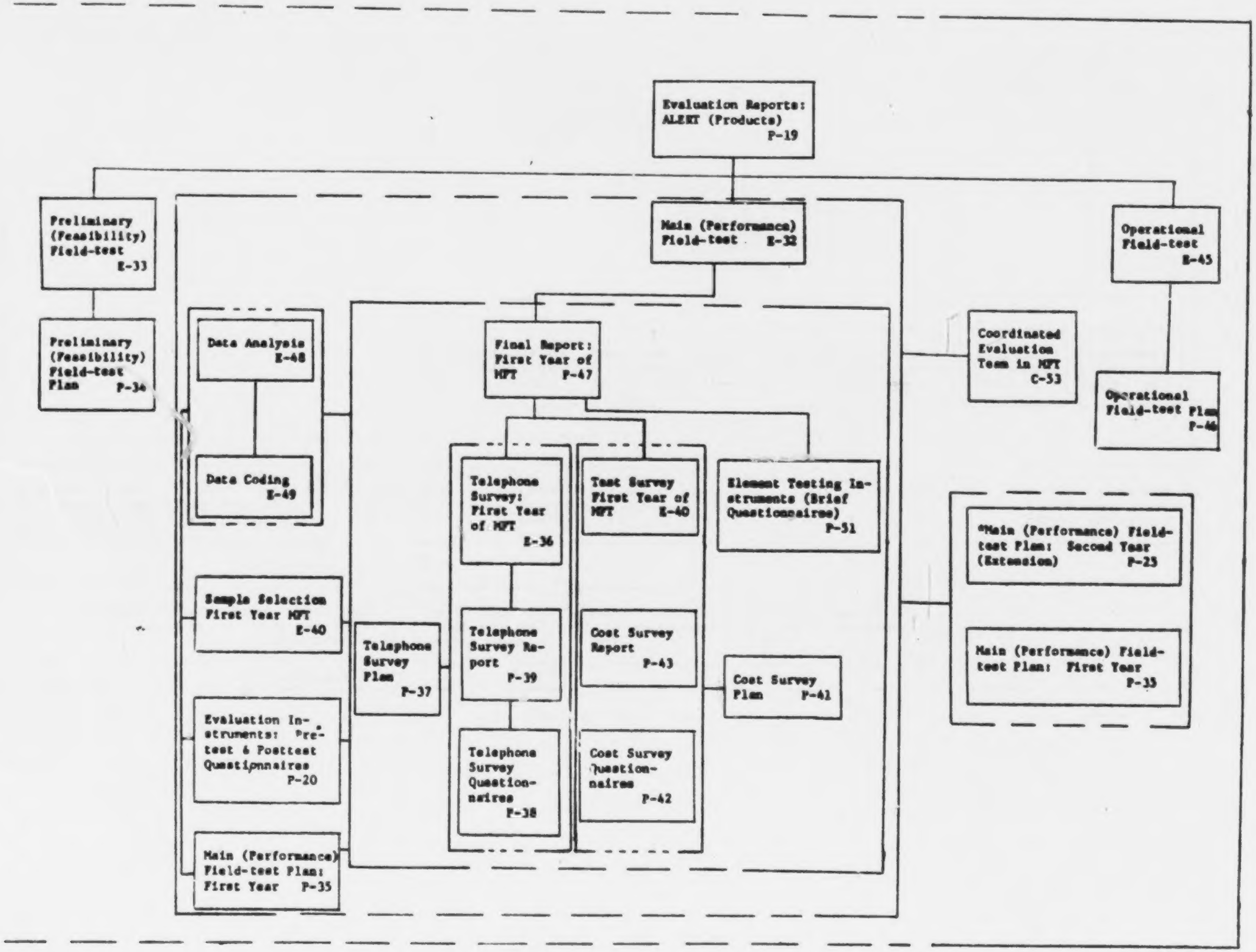
Evaluation Reports: ALERT (Products) P-19
Preliminary (Feasibility) Field-test E-33
Preliminary (Feasibility) Field-test Plan P-34
Main (Performance) Field-test E-32
Operational Field-test E-45
Operational Field-test Plan P-46
Coordinated Evaluation Team in MFT C-53
Data Analysis E-48
Data Coding E-49
Final Report: First Year of MFT P-47
Telephone Survey: First Year of MFT E-36
Test Survey First Year of MFT E-40
Element Testing Instruments (Brief Questionnaires) P-51
Sample Selection First Year MFT E-40
Telephone Survey Plan P-37
Telephone Survey Report P-39
Cost Survey Report P-43
Cost Survey Plan P-41
Evaluation Instruments: Pre-test & Posttest Questionnaires P-20
Telephone Survey Questionnaires P-38
Cost Survey Questionnaires P-42
Main (Performance) Field-test Plan: First Year P-35
*Main (Performance) Field-test Plan: Second Year (Extension) P-25
Main (Performance) Field-test Plan: First Year P-35

Fig. 3. Output map concluded

Chapter III: Summary of the Data

The interview data collected from the project staff are presented in this chapter in a summary form of coded statements. The coded statements themselves are found in Appendix A and the tables included in this chapter each summarize this data by category and by the outputs interviewed around during the site visit. The interviews sought to elicit for each output to be analyzed the standards by which one judges satisfactory completion of the output, the tasks required to generate an output meeting those standards, and the enablers (knowledges, skills, sensitivities) which facilitate the carrying out of those tasks.

Within each category is a series or set of descriptive labels which are representative of interviewee statements (raw data) within a particular category. These descriptive labels are listed in the table under the category heading. In the process of reducing the raw data, narrative interviewee statements (raw data) about an output were linked to one of the three major categories. Each narrative statement was then classified by means of a number code according to the most representative descriptive label within a given category or subcategory.

Each table provides the frequency with which interviewees cited specific statements (which are represented by the descriptive labels in the tables) of standards (Tables 1 and 2), tasks (Table 3) and enablers (Tables 4, 5, 6) in relation to the outputs that are listed.[5]

Standards Held for Outputs

Tables 1 and 2 present the standards elicited against the listed outputs. The standards are subdivided and tabulated under two major sets or categories--Output standards (Table 1) and Process standards (Table 2).

Of the statements elicited from the interviewees relative to output standards, there was a slight concentration opon the Utility or Value of an output. Looking at some of the narrative statements in Appendix A, Utility or Value of the outputs listed in Table 1 refers to:

Practical and convenient to use.

---

[5] If the reader is interested in the narrative statements of the interviewees (raw data), these can be found in Appendix A. To locate the narrative statement for any given category, first note the output and its identification number in the table. Second, note that each descriptive label within a given category has a distinct number or code. Turn to Appendix A and locate the output. Under the output locate the category label or heading (standard, task, or enabler) and pinpoint the number or numbers (depending on the frequency cited) of the descriptive label which appeared in the table. The statement in the appendix opposite this number is the original narrative statement from an interviewee and is only represented in the table by the descriptive label and its numerical coding.

TABLE 1

Output Standards Cited for Each Output Analyzed

Project Outputs		Primary Categories of Standards for Outputs (Category code no. and label for coding set J-1)																		
No.	Label	01 Completeness of content	04 Communication and clarity	05 Utility or value	06 Acceptance by users	07 Personal satisfaction/feeling	11 Appropriateness design/content	12 Goal attainment	13 Acceptance by others (in proj)	17 Internally consistent	18 Satisfactory appearance	20 Performs consistently	21 Sources of variance controlled	22 Functions as planned	23 Successfully constrains/guides	24 Terminology appropriate	28 Operable by others	29 Meets design expectations	33 Inclusions are representative	Output Totals
P-01	Initial ALERT Package ("Recipe Boxes")	1				1			1							1				4
P-14.	Report Manual (for Writers)		2	6			1	1	1					2	1					14
P-16	Information Units			1	1		2				2	1	1				1		1	10
P-25	2nd Year Main (Performance) Field-test Plan for ALERT								1	1				1						3
E-55	Meeting of ALERT staff to Discuss a Publisher's Proposal													1						1
P-58	ALERT System							1										1		2
Category Totals		1	2	7	1	1	3	2	3	1	2	1	1	4	1	1	1	1	1	34

TABLE 2

Process Standards Cited for Each Output Analyzed

Project Outputs		Primary Categories of Standards for Processes (Category code no. and label for coding set J-2)															
No.	Label	02 Personnel are satisfied	04 Deadlines are met	05 Acceptable level of output	08 Staff contributions accepted	10 Maximum possible participation	14 No felt deficiencies	18 Desired personnel obtained	25 Staff reflect trust	26 Values and objectives match	28 Closure reached on questions	33 Personal growth/productivity	36 Employment criteria met	44 Responsibility taken willingly	45 Resources used efficiently	46 Staff are self-directing	Output Totals
P-01	Initial ALERT Package (Recipe Box)						1										1
P-16	Information Units		1														1
C-26	Staff Welfare	1		1													2
C-54	Staff Morale					1		1	2			1		1	1	1	8
E-55	Meeting of ALERT Staff to Discuss a Publisher's Proposal				1						1						2
C-56	Conceptual Leadership for Project									1		1					2
E-57	Staff Hiring												4				4
Category Totals		1	1	1	1	1	1	1	2	1	1	2	4	1	1	1	20

> Manual is useful to intended user/target audience.
>
> Manual had to have utility for or be equally serviceable for inhouse (Laboratory) writers as well as the intended users of manuals.
>
> Meets user needs for information to assist in decision-making.

Also, note that the majority of the narrative statements represented by the descriptive label "utility or value" were cited in relation to one output--the Report Manual for Writers.

Within the Output standards table there were a total of 34 narrative "standard" statements elicited from interviewees relative to six outputs of the ALERT Project. Note, however, that there are only 18 descriptive labels from the output standards categories which are listed to represent those 34 narrative statements.

Of the standards cited, the majority were reported in relation to two of the outputs--the Report Manual for Writers and the Information Units. Note also the wide variety of standards that were cited for each of these two outputs.

Associated with the production dimension are standards dealing with the processes of managing staff and resources to produce the intended outputs of the project (Table 2). Concentrations of process standards (slightly more than one-half) appear in relation to Staff Welfare and Staff Hiring. In terms of Staff Hiring, the data seem to indicate concern with hiring qualified staff that will meet certain specified criteria and will be able to competently execute the specified tasks. The data further indicate concern with allowing the staff adequate latitude in carrying out tasks, and balancing the demands with their capabilities and interests.

Tasks Pertaining to Output Attainment

In Table 3, a total of 167 narrative "task" statements were elicited from interviewees relative to 10 outputs. These 167 narrative statements are represented in Table 3 by 19 descriptive labels from the task categories.

Of the 10 outputs analyzed, five were tangible outputs or products and five were events or conditions seeking either to control, facilitate, or direct the production and diffusion of those products. The majority of tasks cited (114 narrative statements) were in terms of the tangible outputs or products with task concentrations on the Initial ALERT Package (recipe box), the Report Manual for Writers, and the Information Units. In terms of the events and conditions, tasks were focused upon Staff Welfare (13), Staff Hiring (11), and Conceptual Leadership (11).

TABLE 3

Tasks Cited for Each Output Analyzed

Project Outputs		Clusters of Tasks (Category code no. and label for coding set NO)																			
		Clarifying problem addressed	Formulating objectives	Designing the output	Producing the output	Collecting/processing data	Assessing the output quality	Diffusing the output	Procuring professional staff	Effecting accountability	Procuring systems/services	Effecting quality control	Maintaining job satisfaction	Facilitating growth of staff	Enhancing physical environment	Facilitating relationships	Effecting info flow patterns	Diffusing info within project	Diffusing info beyond project	Effecting decision mechanisms	
No.	Label	01	02	03	04	05	06	07	21	22	23	24	25	26	27	29	30	31	32	33	Output Totals
P-01	Initial ALERT Package (Recipe Box)	2		3	11	1	1	3		3		4		1		1	1				31
P-14	Report Manual (for Writers)		2	2	3	3	11					2									23
P-16	Information Units	8		1	4	1	2	1		5	3	3				1	3				32
P-25	2nd Year Main (Performance) Field-Test Plan for ALERT	2	3	3	2		1					1									12
C-26	Staff Welfare									3			3	1	3	2	1				13
C-54	Staff Morale								1	1		1	3	3						1	10
E-55	Meeting of ALERT Staff to Discuss a Publisher's Proposal	3	1			1						2						1			8
C-56	Conceptual Leadership for Project										1	3	1	2				2	1	1	11
E-57	Staff Hiring								10	1											11
P-58	ALERT System	3	1		1	2					1	3				2		1			14
Cluster Totals		18	7	9	21	8	15	4	11	13	5	19	7	7	3	6	5	4	1	2	165

In terms of the Initial ALERT Package and the Report Manual, there are multiple entries for the descriptive labels Producing the Output and Assessing the Output Quality respectively. The data indicate that in terms of the Initial ALERT Package 11 distinct yet similar tasks were executed within the general activity/classification of Producing the Output. Since one of the primary goals is to produce ALERT Packages, it seems logical that tasks would be concentrated within the aforementioned descriptive label.

Relative to the Report Manual for Writers, data indicate a concentration of activity within the task category of Assessing the Output Quality. However, the number of tasks represented by this desciptive label do not constitute a majority of the total number of tasks reported in relation to this particular output. It only represents about one-half of the total tasks reported. Further, given the intended use of the output (Report Manual for Writers), the clustering of tasks around this descriptive label seems to be appropriate to ensure its effectiveness and usability.

Heavy concentrations of tasks appear under the following descriptive labels: Clarifying the Problem Addressed (18), Producing the Output (21), Assessing the Output Quality (15), Effecting Accountability (13), and Effecting Quality Control (19). Since the primary goal of this project is to produce and diffuse ALERT Packages and the ALERT System, the areas in which the tasks have been focused (as stated above) seem logical and appropriate. Note that a good deal of attention seems to be given the tasks relating to effecting quality control. Generally this involves monitoring work progress and resources and critically reviewing project activities and outputs.

Enablers Pertaining to Output Attainment

Tables 4, 5, and 6 present the enablers elicited from the interviewees against the listed outputs. Enablers are subdivided and tabulated under three major sets or categories--knowledges (Table 4), skills (Table 5), and sensitivities (Table 6).

Within Table 4 there were a total of 37 narrative "knowledge" statements elicited from interviewees relative to nine outputs. These 37 narrative statements are represented in this table by 14 descriptive labels from the knowledges category.

Knowledge requirements clustered largely around Subjects Related to RDD&E and Project Variables, External. Looking at the narrative statements in Appendix A, these knowledges generally refer to:

> Curriculum developments or packages.
>
> Research and evaluation designs.
>
> Statistical and analysis procedures
> applicable to data that have been collected.

TABLE 4

Enabling Knowledges Cited for Each Output Analyzed

Project Outputs No.	Label	Primary Categories of Enabling Knowledges (Category code no. and label for coding set S-1) 01 Standard school subjects	02 Subjects learned in courses	03 Subjects related to RDD&E	04 Technical/professional topics	06 Project variables, external	07 Project operation: general	08 Project operation: specific	10 Staff status/responsibility	19 Technical terminology/language	21 Management techniques	22 Use of equipment/systems	24 Process implementation (proj)	25 Sources of info/material	28 Group dyn/decision processes	Output Totals
P-01	Initial ALERT Package (Recipe Box)		1	2		2										5
P-14	Report Manual (for Writers)	1			1		1	2		1			2			8
P-16	Information Units		2	2		6										10
P-25	2nd Year Main (Performance) Field-test Plan for ALERT			4	1							1				6
C-26	Staff Welfare														1	1
C-54	Staff Morale								1		1				1	3
E-55	Meeting of ALERT Staff to Discuss a Publisher's Proposal														1	1
C-56	Conceptual Leadership for Project			1										1		2
E-57	Staff Hiring								1							1
Category Totals		1	3	9	2	8	1	2	2	1	1	1	2	1	3	37

TABLE 5

Enabling Skills Cited for Each Output Analyzed

Project Outputs		Primary Categories of Enabling Skills (category code no. and label for coding set S-2)																							
No.	Label	02 Facilitating people interactn	05 Programming project events	08 Analytical reading/study	10 Analytical data handling	•11 Disciplining self	14 Writing	15 Presenting orally	17 Interpreting language	18 Finding fits/integrating	19 Planning/conceptualizing	20 Exercising judgment	21 Tracking activities/goals	22 Estimating expenses/resources	23 Persuading/justifying	24 Explicating goals/procedures	27 Using equipment/systems	29 Getting other's to perform	32 Identifying/correcting errors	33 Graphically illustrating	34 Coordinating activities	38 Using resources effectively	42 Eliciting responses	45 Assessing personal performances	49 Interacting productively	Output Totals
P-01	Initial ALERT Packages (Recipe Box)			1			2		1	1						2			1							8
P-14	Report Manual (for writers)			1			3			1									1							6
P-16	Information Units			2	2	1	2				3	1	1	1			1		1	1	1	1	1	1	2	22
P-25	2nd Year Main (Performance) Field-test Plan for ALERT				2		1										1					1				5
[illegible]	[illegible] Morale	1	1															1			2					5
[illegible]	[illegible] of ALERT Staff to Discuss a Publisher's Proposal				1			1			1															3
C-54	Conceptual Leadership for Proj.		1	1											1										1	4
C-57	Staff Hiring											1														1
	Category Totals	1	2	5	5	1	8	1	1	2	4	2	1	1	1	2	2	1	3	1	3	2	1	1	3	54

TABLE 6

Enabling Sensitivities Cited for Each Output Analyzed

Project Outputs		Primary Categories of Enabling Sensitivities (category code no. and label for coding set S-3)																					
No.	Label	02 Capabilities and limitations	03 Needs of self and others	10 Awareness of structure	13 Language barriers	15 Degrees of freedom to deviate	16 Existing value systems	17 Personality of others	18 Potential conflict of interest	19 Supportiveness required	22 Responses of tgt audiences	24 Sources of error	25 Individual differences	27 Acceptability of output	30 Response sets of tgt audiences	31 Nature/scope of output	37 Willingness to delegate	38 Emerging directions	41 Inquisitiveness	52 Awareness of staff affects	55 Respect for/trust in others	58 Willing to support staff	Output Totals
P-01	Initial ALERT Package (Recipe Box)							1		1						1			1	1	1		6
P-14	Report Manual (for writers)		1		3	1	1				1			1	1								9
P-16	Information Units	1	1	1					1				1					1					6
P-25	2nd Year Main (Performance) Field-test Plan for ALERT											1											1
C-26	Staff Welfare	1	3					1	1						1								7
C-54	Staff Morale																2					1	3
E-55	Meeting of ALERT Staff to Discuss a Publisher's Proposal			1																			1
	Category Totals	2	5	2	3	1	1	2	2	1	1	1	1	1	2	1	2	1	1	1	1	1	33

There is a concentration of knowledges around the Information Units. Since the largest concentration of tasks focused on this product--which is a major component of one of the focal outputs[6]--it seems appropriate that a concentration of enablers (in this case knowledges) would also be focused on this output. In addition, note that almost one-half of the skills cited in Table 4 are in relation to the Information Units.

Keeping in mind the nature and intended use of many of the project's outputs, skills related to writing seem to be critical. Linking these skills to the tasks and standards cited for the major outputs suggests the level of skill required.

Senstivity to language barriers and needs of self and others are categories most frequently cited by those interviewed. Staff welfare is again emphasized with the necessity of being aware of others' needs. Relative to the report manual, which is intended for use by other writers, being sensitive and aware of language barriers seems to be crucial to ensure maximum utility of that product.

---

[6] See Figure 3, Output Map.

Chapter IV: Supplementary Data

Data in this chapter are primarily derived from questionnaires submitted to project interviewees. Included are data about output classifications, the backgrounds of interviewed project personnel, the job requirements for the project, and the support resources of the project.

Classifications of Output Characteristics

Outputs may be categorized in terms of a number of variables. Among them are (a) Structure (product, event, or condition), (b Function (policy setting, management, or production), (c) Level focal, component, or facilitating), (d) Character (knowledge, technology, implementation, or information), and (e) Stage of completion. These five schema are represented in Table 7 for each project output identified, with frequencies summarized for each category.

Summary of Staff Backgrounds

Data concerning the academic and professional backgrounds of seven staff members were obtained. Two staff members had doctoral degrees, three had master's degrees, and two had bachelor's degrees. Their collective specialty areas were reported as follows:

Psychology (Social Psychology)
Communication Research
Education/Teaching/Special Education
French
Political Science
English/Writing
Psychology/Teaching/Education

The work experience of the seven staff interviewed is summarized in Table 8. Interviewees were also asked questions pertaining to what prior training and education they had and what they thought was necessary for work on this project. All indicated that their positions required work experience in educational research, development, diffusion, and/or evaluation; work experience in administration; and work experience in management. The number of years work experience required in each of the areas as averaged from interviewees' responses are as follows:

(a) Experience in R,D,D, and/or E - 2.4 years (average)
(b) Experience in administration - 2.0 years (average)
(c) Experience in management - 1.5 years (average)

TABLE 7

Classifications of Output Characteristics

Project Outputs		Output Characteristic[a]																		
		Structure			Function			Level			Character (Products only)				Completion Stage					
No.	Label	p	e	c	pa	m	p	f_1	c	f_2	k	t	i_1	i_2	1	2	3	4	5	6
P-01	Initial ALERT Package (Receipe Box)	X					X		X			X								X
P-02	Package Instruction Booklet (With Receipe Box)	X					X		X			X				X				
P-03	ALERT Punched Cards	X					X		X			X								X
P-04	ALERT Abstracts	X					X		X					X						X
P-05	ALERT Summaries	X					X		X					X						X
P-06	Telephone Record Form	X				X				X		X				X				
P-07	Summary Worksheet	X				X				X		X				X				
P-08	Card Worksheet	X				X				X		X				X				
P-09	Giant Card	X				X				X		X				X				
P-10	Card Preparation Manual	X				X				X		X							X	
P-11	Summary Manual	X				X				X		X							X	
P-12	Style Manual	X				X				X		X						X		
P-13	Selection Manual	X				X				X		X						X		
P-14	Report Manual (For Writers)	X				X				X		X						X		
P-15	ALERT Reports	X					X		X					X				X		
P-16	Information Units	X					X		X				X							X
P-17	Audio-Visual Materials for Information Units	X					X		X				X							X
P-18	Scripts for Audio-Visual Materials	X					X			X		X								X
P-19	Evaluation Reports	X				X				X				X						X
P-20	Questionnaires	X				X				X		X								X
P-21	ALERT Packages (Materials)	X					X	X					X							X
P-22	Promotional Film Strip-tape	X				X				X			X			X				
P-23	Promotional Brochure	X				X				X			X			X				
P-24	Tape Script (Promotional)	X				X				X		X				X				
P-25	2nd Year Main (Performance Field Test Plan for ALERT	X				X				X		X						X		
C-26	Staff Welfare			X		X				X										X
P-27	Task Conceptualization Paper	X				X				X		X				X				
P-28	Monthly Narrative Analysis Reports	X				X				X				X						X
P-29	Financial Analysis Reports	X				X				X				X						X
P-30	Contractor's Request for 1971 Funding	X				X				X		X			X					
E-32	Main (Performance) Field Test of ALERT		X			X				X								X		
E-33	Preliminary (Feasibility) Field Test of ALERT		X			X				X						X				
P-34	Preliminary (Feasibility) Field Test Plan for ALERT	X				X				X		X				X				
P-35	1st Year Main (Performance) Field Test Plan for ALERT	X				X				X		X						X		
E-36	Telephone Survey of ALERT in Main Field Test		X			X				X							X			
P-37	Telephone Survey Plan for ALERT in Main Field Test	X				X				X		X				X				
P-38	Telephone Survey Questionnaire	X				X				X		X				X				

TABLE 7 CONCLUDED

Classifications of Output Characteristics

Project Outputs		Output Characteristic[a]																		
		Structure			Function			Level			Character (Products only)				Completion Stage					
No.	Label	p	e	c	ps	m	p	f_1	c	f_2	k	t	i_1	i_2	1	2	3	4	5	6
P-39	Telephone Survey Report	X				X				X				X			X			
E-40	Cost Survey of ALERT in Main Field Test		X			X				X							X			
P-41	Cost Survey Plan for ALERT in Main Field Test	X				X				X		X				X				
P-42	Cost Survey Questionnaire	X				X				X		X				X				
P-43	Cost Survey Report (Informal-Mostly Verbal)	X				X				X				X			X			
E-44	Sample Selection for ALERT 1st Year Main Field Test		X			X				X						X				
E-45	Operational Field Test of ALERT		X			X				X									X	
P-46	Operational Field Test Plan for ALERT	X				X				X		X							X	
P-47	1st Year Main (Performance) Field Test Final Report	X				X				X				X				X		
E-48	Data Analysis		X			X				X										X
E-49	Data Coding		X			X				X										X
P-50	Utilization Plan for ALERT	X				X				X		X							X	
P-51	Element Testing Instruments (Questionnaires)	X				X				X		X								X
P-52	Milestone Schedule	X				X				X		X				X				
C-53	Coordinated Evaluation Team in Main Field Test of ALERT			X		X				X								X		
C-54	Staff Morale			X		X				X										X
E-55	Meeting of ALERT Staff to discuss a Publisher's Proposal		X			X				X							X			
C-56	Conceptual Leadership for Project			X	X					X										X
E-57	Staff Hiring		X			X				X					X					
P-58	ALERT System	X					X	X					X					X		
Classification Frequencies[b]		43	10	4	1	45	11	2	8	47	0	28	6	9	2	17	5	10	5	18

[a] The specific output characteristics are identified as follows:

Structure

p - product
e - event
c - condition

Function

ps - policy setting
m - management
p - production

Level

f_1 - focal
c - component
f_2 - facilitating

Character

k - knowledge
t - technology
i_1 - implementation
i_2 - information

Completion Stage

1 - completed over one year ago
2 - completed 3 to 12 months ago
3 - completed within last 3 mos.
4 - currently in progress
5 - not yet underway
6 - on going (continuous)

[b] Data totals in this table may vary slightly from data in tables reported elsewhere. This is a function of decision rules governing classification of outputs having been revised and applied to these data subsequent to the preparation of the profile.

TABLE 8

Summary of Staff Backgrounds

Work Setting/Context Category	Amount of Experience				Total No. of Staff
	No. Experience	Less Than 1 Year	1 - 4 Years	5 or More Years	
In R,D,D, or E Work	0	0	5	2	7
In Administrative Work	3	0	2	2	7
In College Teaching or Research	3	0	4	0	7
In Public Schools	5	0	1	1	7
In State or National Education Agencies	6	0	1	0	7
In R & D Centers	4	0	2	1	7
In Other Work Settings	4	0	1	2	7
In Present Organization (May be concurrent with other areas identified above).	0	1	5	1	7

Concentrations of data in the above table indicate that

(a) All interviewees had experience in research, development, diffusion or evaluation work, and

(b) Most of the interviewees had no experience working in public schools and state or national education agencies.

Interviewees were asked, "What specific knowledges and skills does your position require?" Their responses were as follows:

R&D management including personnel, organization, scheduling, contracts, proposal writing, and general supervision.
Broad knowledge of social science.
Specific knowledge of educational technology, evaluation, and systems development.
Knowledge of research methodology.
Management ability.

Background in diffusion science (science of knowledge utilization).
Knowledge of R&D methodology and procedures.
General awareness of trends in curriculum and general education.
Excellent writing skills--jargon free and educationese free.
Ability to work well with people including leadership, firmness, consideration, and giving criticism effectively.

General level knowledge of education, i.e., school organization, staffing patterns, curriculum selection and implementation.
Strong research and writing skills.
Aptitude for conceptualization and then implementation of models and systems for displaying processed information.
Knowledge of math and science curriculum.
Knowledge of trends in elementary education.

Analytical ability.
Information gathering skills.
Ability in writing for lay audiences.
Ability to conceptualize systems and products.
Ability to plan and carry out development and testing of products.

Several interviewees emphasized the necessity of good writing skills--particularly the ability to write clearly with minimum use of jargon--so that the documents could be understood and used by a wide variety of people.

Support Resources and Equipment

Those support resources called upon by the staff and seen as necessary included:

Equipment construction.
Printing.
Duplication services. (Xerox; audio reproduction)
Photography.
Art work and illustrations.

Drafting.
Technical writing.
Editing.
Secretarial service, other than typing.
Typing.

Purchase of supplies.
Library holdings.
Subscriptions to technical and professional journals/periodicals.
Requests for documents or publications not locally available.
Computer analysis services. (data processing)

Computer program writing.
Statistical consultation.
Audio-visual aides and devices.
Subjects for experimentation or tryout of procedures.
Travel arrangements.

Budgetary and other fiscal accounting.
Scoring of test items.
Television facilities and equipment.
Budget and fiscal projection-analysis.
Contract monitoring.

Speech writing.
Public relations.
Dictating equipment.
Desk calculators.
Desk-top computer.

Photographic equipment.
Readers for microfiche or microfilm.
Filmstrip and audio tape preparation equipment.
McBee card gang punch.
MTST/typewriters.

Copy machines.
Tape recorder.
Filmstrip projector.
Carousel slide projector.
Film projector.

Battery charger.
Telephone.

Summary of General Position Activities

By questionnaire, project personnel interviewed were asked to rate nine general activity categories on an eight point scale. The scale represents the significance of an activity in the respondent's project work from 0, "Definitely not a part of my project activity, does not apply" to 7, "A most significant part of my work." The rankings are listed by position/title over the nine categories in Table 9.

It can be seen from Table 9 that the activity of "supervising and coordinating actions of others, and/or of material resources" occupies a considerable amount of time of each of the staff interviewed even though these positions are of considerably different responsibility

TABLE 9

General Position Activities Ratings

General Position Activities	Position/Title						Mean of ratings
	Program Director	Senior Program/ Project Associate II (Acting Project Director	Senior Program/ Project Assistant II (Task Manager)	Senior Program/ Project Assistant II (Evaluation Team Leader)	Senior Program/ Project Assistant I (Task Manager)	Program/ Project Assistant II (Writer/ Editor)	
A. Reading	3	2	5	4	4	5	3.8
B. Designing or planning procedures activities for the project	5	6	4	4	7	4	5.0
C. Developing research tools or other information gathering instruments	2	1	3	5	1	3	2.5
D. Collecting project data	2	0	5	5	3	6	3.5
E. Analyzing data	3	1	5	5	1	7	3.7
F. Writing	4	4	5	7	4	7	5.1
G. Supervising and coordinating actions of others, and/or of material resources	6	7	7	6	6	5	6.1
H. Teaching or training	3	4	2	3	0	4	3.1
I. Meeting, consulting, or advising	6	6	5	4	3	4	4.7

level within the Laboratory. The other activities of "designing or planning procedures and activities for the project", "writing", and "meeting, consulting, or advising" also tend to be significant activities across these six positions. The spread of these significant project activities across staff at such diverse position levels indicate a participative management approach. This will be discussed further in Chapter V.

From a list of additional miscellaneous activities the following activities were ranked as significant to very significant by at least one of the six staff: (a) "editing and/or proofing of printed materials," (b) "determining constraints to problem solution, such as time, money, personnel, and market factors," (c) "developing budgets for tasks of projects," (d) "analyzing the nature of various audiences of 'publics' to prepare appropriate communications," (e) "conferring with colleagues, staff, and/or students," and (f) "interacting directly with personnel of other agencies, such as for field tests, at trial learning centers for potential users of R & D products." The Program Director identified activities b, c, and e as a significant part of his work, while the Acting Project Director identified activities a, b, e, and d as significant in his work. Junior staff identified b, c, e, and f as significant in their work.

Chapter V: Project Dynamics

The work of ALERT is not in the strict sense a discrete set of activities that can adequately be identified as a project. Rather it is a complex of closely related and overlapping activities oriented around the fairly specific objective of establishing "a technology to process information about educational development." Of the three components of the Communication Program, most all the work of the Information Processing Component has been absorbed into ALERT, making this effort a multilevel activity.

History of ALERT

The goal which was identified for the Communication Program at the establishment of the Far West Laboratory for Educational Research and Development in 1966 was to "create an effective means of articulation between educational R&D and its potential users in the school by developing a comprehensive and integrated system for both processing and using information." Within these limits, the Information Processing Component of the Communication Program set for itself the task of developing "information-processing system 'technologies' capable of providing specific information about educational developments." In this conceptual context the first information system, Information Units, was developed in 1967. The Information Units were designed as "packaged, mailable, multimedia, multilevel, comparative information about exemplary developments in selected curriculum subject areas." Information Units have been developed in areas such as elementary science, secondary social studies, individualized instruction, early childhood education, and drug education. The initial units did vary in media and format; however, each provided three levels of information (survey, briefing, detailed) usually covering five to eight development programs in the selected areas.

The Information Units were found to be useful in the school; however, as one staff member comments, "As we were developing these units we felt that they (the Information Units) were too confining in that they dealt with one subject area. (Each Information Unit dealt with a single subject, i.e., elementary science, without a general indexing system across all the Information Units.) We wanted an information system that was more comprehensive and global, that would allow the user a greater range of choice in subject areas." From what was learned in the development of the Information Units, conceptualization of a "second generation" information system was initiated that not only would incorporate the information unit concept, but also provide a greater range of subject areas and more flexibility in use. In 1970 the design and field testing of the ALERT information system was begun.

At the time of observation (June 1971), the development of the system had been underway for about one to one and one-half years. Initially the system was conceived as an information system at the elementary school level; however, exploration of the secondary level has begun, and the system will eventually, according to its developers, comprehensively cover both levels.

Beyond the information units, the conceptualization of the ALERT system involved the designing of information indexing and briefing components, as well as the technology for information collection, processing, and dissemination subsystems. A concept paper for ALERT was prepared by the Director of the Information Processing component. The conceptualization process was one where the Component Director held a series of meetings with five or six of the staff to discuss various ideas. These meetings were described as "brainstorming" sessions where the Director of the Component threw out ideas for reaction from the staff. The ideas from these meetings were written up and distributed to the staff, in general, for their reactions and critique. This informal, inhouse procedure seems to have been fairly characteristic of how the general conceptualization of ALERT was accomplished.

The developers indicated that ALERT was in an "advanced prototype stage" at the time of observation: "we are just now completing," commented one staff member, "the 'main field test' which we started in October 1970. We installed ALERT in about 100 sites in five states. This included school districts and individual schools."

The main field test (MFT) is one of three field tests (see the laboratory model) that the ALERT system development will go through. The others are a preliminary field test and an operational field test.

During the MFT, pre- and post-questionnaires were used to empirically determine whether or not the system is meeting its objectives. Element (brief) questionnaires were used to gain information on a specific element's effectiveness, and both a telephone and a cost survey were conducted. It is interesting to note that the development of a questionnaire usually involves the use of items developed early in the project or developed on other projects. Thus, from this "pool" of items can be drawn the specific items needed to build a questionnaire. In many cases, little modification of an item is needed.

The selection of the sample for the MFT was done through contacts that the Laboratory had in various states. Letters were sent to the board of education in each state asking them to locate a certain number of sites that fit certain criteria, i.e., expenditure per pupil (high and low), isolated or rural-urban distinction. From these lists, the individual schools were contacted and asked to participate. The developers indicate that about 90% of the schools contacted agreed to participate.

The preliminary field test of ALERT had been completed prior to the time of observation. It consisted of bringing a selected group of people into the Laboratory to see the ALERT system as conceived, and collecting opinions by questionnaire about ALERT's feasibility and effectiveness.

At the time of observation, ALERT was in the MFT with the operational field test yet to be accomplished.

Organizational Notes

The activities of ALERT seem to cluster by production, management, and evaluation. While evaluation tends to maintain considerable autonomy, production and management tend to merge, especially at the junior professional levels. But within these work clusters, teams are formed as the basic organization by which the work of ALERT is accomplished. These teams tend to be composed of about three people. This team concept was used throughout the Communication Program and its various components as well as in the Information Processing (ALERT) component. Essentially all activities are accomplished by teams. For example, one team of writers may do reports, sort-cards, and summaries in special education and vocational education, or in early childhood education. Another team may be working on similar products, but in another subject area such as language arts--English or foreign languages. People in these groups tend to be individuals with background both in the subject area and in writing areas outside of education.

A separate team conducts evaluations of all ALERT packages regardless of subject area. This team consists of a leader and three members that include a "Program Assistant," a middle level professional position in the Laboratory; a "Research Intern," the lowest level professional position; and a "Research Clerk." The Program Assistant provides backup to the team leader, the Research Intern does coding, interviewing, and may do some data analysis. The Research Clerk does all the typing, filing, handles correspondence, and various other jobs.

The staff-to-secretary ratio seems to run about two or three to one. Secretarial services, especially typing, are at times pressed to meet the needs of the professional staff. However, support services in general were reported as adequate.

Management Style

The management and organization of the ALERT effort has been strongly influenced by the Communication Program Director. This influence has become even more pervasive with the loss of the former Information Processing Component Director and conceptual author of ALERT. At the time of observation the ALERT component was managed by an acting director. A newly appointed director was due to assume leadership shortly after our visit.

The management style throughout the Communication Program, as well as in ALERT, is a participatory management approach with responsibility being delegated at the various levels and problems and decisions being handled on a team basis at those levels. These levels include the Program level, the Component level, a mid-level in the Component, and a task level. Information flow is accomplished by participation in meetings, etc., of a liaison staff member from each of the levels, and by regular reports from these staff members. This procedure allows a number of staff to become involved in management activities along the vertical dimension of the staff. This requires management ability across the staff and a willingness to allow decisions to be made by a team at the level at which problems occur. This approach would seem to eliminate many of the lesser concerns or problems that top management would otherwise have to contend with, while sponsoring more and broader staff participation in management. But this could also lead to isolation of the various levels, and reserve to top management only the more important or significant considerations.

Communication and Reporting

Communication within ALERT and at the program level generally seemed to occur informally. Some of the meetings were regularly scheduled, serving as update sessions. Generally it is understood that an open office door means that that staff member is receptive to visits from other staff.

In reporting, the most formalized procedure used is a "narrative analysis." This report is prepared by the team leaders/task managers at the task level. These one page progress reports are written monthly and insure information flow to the Component Director and the Program Director.

The "narrative anlysis" is a management tool that has been instituted to help in the monitoring of ALERT, as well as other work in the Program. A one page "planned/actual expenditure report" was being initiated at the time of our observation. This would be prepared at the task level and updated monthly. Also, at the time of our observation, there was talk of a "reverse narrative analysis" that could be prepared by the Program or Component Director. However, this was yet to be realized. Consequently the downflow of information was less well established and occurred mostly in meetings which tended to be called on an irregular basis.

One staff member summing up the communication and reporting process indicated that "we have meetings of the whole component staff from time to time when there are specific problems. We no longer have regular staff meetings. We are supposed to report once a month on our activities/program for a specific task."

Most all the reporting, formal and informal, at the agency level, inhouse and out, seemed to be primarily the responsibility of the Program Director. However, the Program Director indicated that the staff is encouraged to represent their projects before various public audiences and at professional conferences.

Physical Setting

The offices of the Communication Program where the work of ALERT is being conducted are located in downtown Berkeley. The location of the offices seems fairly accessible. Auto parking facilities are located nearby. The University of California at Berkeley campus is just a short distance. The main offices of the Laboratory are about a mile from this location. The Communication Program occupies most of the third floor and part of the first floor of the multistory stone building in which it is housed. The first floor is shared with another program of the Laboratory and with library facilities. The offices of the evaluation team for the Communications Program and a mail room are on the first floor. On the third floor are the offices of the writing teams and management of the ALERT component and the Communications Program. The offices of staff employed in the other components of the program share this floor.

The decor of the offices varied a great deal, from carpeting and wood furnishings to tile floors and institutional furnishings. The furnishings, other than a desk, usually included one or two chairs, a book case or two, and file cabinet. All offices had at least one window. Lighting was florescent. The size of the offices varied considerably. In fact, a shortage of office space forced many of the staff either to be doubled up or to be officed in a large central area of the third floor that was partitioned by portable dividers. It was mentioned that the only space left for new staff was the conference room.

The conference room occupied a part of the space available on the third floor. It was a fairly large room, carpeted and furnished with a large table and chairs. At one end of the room was a blackboard. The room had several windows, with the electrical lighting being florescent. The conference room was very convenient to all the offices on the floor, and was scheduled through the Program secretary.

All in all the physical setting seemed to be very adequate, but limited space was a problem, especially in maintaining some privacy for such tasks as writing. The street and traffic noise tended to be noticably loud at times.

Policy

Probably the most significant policies affecting the work of ALERT are those set at the program and Laboratory level. However, within ALERT some policies such as the following production procedure have become somewhat formalized:

1. Rough draft written.
2. Typed rough draft.
3. Writer reviews rough draft.
4. Rough draft is proofread by proofreaders for style.
5. Component Director edits draft for content.
6. Draft returned to proofreader for second style edit.
7. Final draft typed.
8. Writer reviews final draft.
9. Any corrections necessary are made.

In a sense, too, the technology that is being developed in ALERT certainly does affect the methods and procedures of the development itself. Formats, styles, and content are specified.

Some policies at the program and/or Laboratory level that affect ALERT and its people include: working hours from 8:30 a.m. to 5:00 p.m. are expected of professional and required of nonprofessional staff. The Laboratory operates on the PPBS system, necessitating that all staff fill out time cards each two weeks to provide information as to which budgets to charge time against. There is considerable paper work necessary in making various requests for such things as equipment, materials, or travel. Each staff member is responsible for his own paper work.

When a money shortage occurs, notices of job terminations are made to the professional staff three to six months before termination.

Hiring recommendations are usually made by the managers at the level for which the applicant is being hired. Of course, the higher the level in the program the more influence the Program Director has in the hiring process. It was indicated by the Component Director that minority applicants are given additional consideration in the screening process.

The development process in ALERT is greatly effected by Laboratory development policy. Rather systematic documentation of work in a program is required early in a development. For example, in ALERT, as the initial conceptualization and design was being accomplished, a concept paper was prepared and submitted to the Program Director for review. Only after this paper was approved by the Director and significant others was work in ALERT allowed to proceed. If it had not been approved money would not have been allocated for the development. At the conclusion of a preliminary development and testing stage the field test and work program is documented and submitted to the Program Director. Approval is necessary for continued work.

This procedure is the initial part of the generic model of development that has been adopted by the Laboratory (see Appendix B).

Issues

The process of ALERT has been greatly effected by several factors with which the development and its people have had to struggle. But probably the most pervasive influence has come as a result of the reorganization of the Communication Program. The components of the program were being given program status while the program was taking on a divisional status. Apparently the reorganization was a response on the part of the Program Director to the need for more efficient management structures required by the large (almost 50) staff and many projects in the program. Given these influences along with the management style, discussed earlier in this chapter, some middle level staff moved into positions of management responsibility for which some, as they indicated, were not prepared.

Other factors such as loss of the conceptual author and Director of ALERT seem to have been a very important influence. Staff at the various levels seem to be adapting to the reorganization at differing rates.

Some very positive influences on ALERT and the whole program are the presences of a "hard money" funding base which allows the kind of systematic planning, development, and stability that is essential to an integrated effort. Also of significance here is the development philosophy of the Program Director whose notion about how one goes about producing a product reflects a tradeoff among blind step-by-step following of a procedure versus a system-design sampling approach versus a cost-effective strategy. All of this is strongly reflected in ALERT.

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Chapter VI: Implications for Training

Within the ALERT Project, two primary skill orientations emerge. Some of the staff members are primarily journalists while the remainder are primarily educational developers. The melding of the two orientations provides the major training implication found in this project.

Those staff members with a primarily journalistic background made it quite clear that people engaging in educational development/diffusion should be trained in journalistic style writing. Their rationale for this position indicated a belief that educational developers/diffusers tend to rely ûpon jargon or "educationese" to the extent that understanding and acceptance of their products outside the R&D community is impaired.

Those staff members with a primarily educational development background appear to agree with the journalistic writers, at least in principle. Without exception, these staff members appeared to accept the value of the journalistic approach in the writing and speaking portions of their outputs. Some of the educational developers were becoming proficient at journalistic writing, while others preferred to depend upon the journalists for interpreting and rewriting their outputs. The need for training to achieve proficiency in the area of journalistic style writing was quite pointedly expressed by a majority of all staff interviewed.

The team approach which was used throughout this project was frequently mentioned as an area which should be emphasized in training. Operation as a team was seen by interviewees as not only bringing an area of expertise to the team effort, but also a mutual consideration of and commitment to the team's goals. It was indicated that even the strongly individualistic staff member must effectively participate as a team member.

Generally, across the staff, skill in managing was identified as an area in which personnel felt the greatest deficiency. The organizational pattern of delegating management responsibilities to the lower echelons has resulted in some staff members expressing a feeling of inadequacy. An implication is seen here that training of R&D personnel should include work in management techniques.

Appendices

Appendix A: Listing of Output Standards, Tasks, and Enablers

The following is a list of standards, tasks, and enablers for outputs around which interviews were conducted. These statements were elicited from discussions with interviewees and were coded into their respective category sets. The selected code precedes the statement and indicates the following for:

STANDARDS

Code J: Structure of Standards.

J-1 Standards against which outputs are judged. (output oriented)

J-2 Standards against which processes and/or operations are judged. (process oriented)

Code LM: Primary Categories of Standards.

TASKS

Code NO: Clusters of Tasks.

ENABLERS

Code S: Structure of Enablers

S-1 Knowledge.

S-2 Skill or ability to perform.

S-3 Sensitivity or awareness.

Code UV: Primary Categories of Enablers (knowledges, skills, or sensitivities).

The codes associated with these three categories (standards, tasks, enablers) are the same both here in the listing and as previously cited in Chapter III tables.

Each of the 10 analyzed outputs is cited below within a rectangular box. Listed under each are the interview statements relevant to that output.

P-01: Initial ALERT Package (Recipe Box)

"Essentially this is a box of cards and a box of summaries. The box of cards includes an instruction booklet and a knitting needle used to sort the cards (edge punched cards) according to the categories around the edge of the card which are explained in the instruction booklet."

STANDARDS:

J	LM	
1	07	Team members subjectively approve their own work.
1	01	High quality of analysis (completeness of description).
1	13	Team leader's supervisor approves all materials to be included in ALERT Package.
1	24	Appropriately worded for target audience.
2	14	Team leader subjectively approves subordinates work.

TASKS:

NO	
01	Study field (ed. journals, foundation supports, USOE project reports, etc) to identify potentially usable developments (within assigned subject matter areas).
01	Study detailed materials sent by developers.
03	Determine, from development complexity, what kind of materials to write (least complex-only card, most complex-card, summary and report).
03	Identify items (descriptors) to be punched out of edge of card on giant card.
03	Identify items (categories) to be edge punched on master card.
04	Select developments for inclusion in ALERT.
04	Use card worksheets to assist in preparing card data and abstract.
04	Use summary worksheet to assist in preparing summary.
04	Prepare materials in set format.
04	Write abstract within card limits.
04	Write summary within four-page limits.
04	Prepare cost sheet data for summary.
04	Type card data, abstract, and summary in proper spacing for printing.
04	Duplicate 500 copies of card in (inhouse) final form.
04	Punch all cards according to master card.
04	Print 500 copies of summary and/or report.
05	Identify master card with accession number.
06	Proofread proof copy.
07	Produce ALERT materials to explain ALERT.
07	Send cards to buyers on a monthly basis.
07	Send summary (with card) to buyer on monthly basis.

22 Assign developments to team members for detailed study.
22 Assign team member to write ALERT package.
22 Send master copy (after proofreading) of summary or report to commercial printer.
24 Select developments for further study.
24 Monitor writing progress to achieve time line.
24 Review and/or approve typed copy (supervisor).
24 Proofread and/or approve typed copy (team leader).
26 Guide writer by editing and suggesting improvements as work progresses.
29 Send ALERT brochure and A-V presentation to developer to describe ALERT.
30 Write developer to obtain project materials.

ENABLERS:

S	UV	
1	03	Practical curriculum development (knowledge).
1	06	Current practices in schools in various subject areas.
1	06	Educational trends.
1	03	Introductory knowledge of research evaluation.
1	02	Introductory knowledge of statistical methods.
2	08	Ability to study and learn in order to gain knowledge in deficient areas.
2	14	Ability to write in magazine style.
2	18	Ability to judge if tests performed were appropriate.
2	32	Skill in editing.
2	17	Skill in translating educational terms into items meaningful to "even the man on the street."
2	24	Clearly stating what (work) is expected.
2	24	Clearly stating how to go about doing work.
3	52	Sensitive to team members interests in assigning work.
3	31	Sensitivity to logical continuity in writing.
3	41	Intellectual curiosity.
3	19	Sensitive to achieving a balance between guidance and freedom.
3	55	Consideration for other people.
3	17	Understanding of different personalities.

P-14: Report Manual (for Writers)

"The Manual contains both general instructions for the experienced writer and more detailed instruction with examples for less experienced writers in the preparation of rather detailed program descriptions which we call reports."

STANDARDS:

J	LM	
1	05	Manual had to have utility for or be equally servicable for inhouse (Laboratory) writers as well as the intended users of manuals (free lance and educational writers).
1	12	Manual not too prescriptive.
1	05	Manual was general enough so that a writer could generate a report about a program/curriculum from almost any field or subject matter area.
1	05	Manual is complete in that there are enough directions and explanations within it that will enable the writer to describe the program/curriculum clearly and adequately for public school personnel to get a good idea of what the program is about and how it might fit into their school context.
1	05	Manual is useful to a variety of audiences--educators who are not particularly good writers; writers who are not oriented to the field of education, etc.
1	05	Practical and convenient to use.
1	13	Acceptance by consortium members.
1	22	Acceptable reports are produced while using the manual (both internally and by consortium members).
1	05	Manual is useful to intended user/target audience.
1	22	Manual (its content) will enable a writer to elicit the necessary information to describe new curriculum developments/programs correctly.
1	23	Manual will not bind or stifle a writer.
1	04	Language/terminology in the manual is understandable to the user audience (writers)--language is clear, simple, and not too jargonized.
1	11	Manual is of adequate length--not too long so it doesn't frighten the user audience or overburden him with too many examples.
1	04	Style in which the manual is written is uncluttered (to prevent too many ideas crammed into one or two sentences), simple, and flows well.

TASKS:

NO	
04	Include (in writers' manual) reasons as to why it is necessary to explain or make clear to the reader certain aspects of the program.
04	Add some admonitory materials to the text of the manual, i.e., admonitions and advice for the writer which he may or may not use.
06	Edit and rewrite most of the manual sections.
06	Evaluate the effectiveness of the language and terminology in the manual on the basis of whether or not a free lance writer was able to use the manual.
06	Change the tone of the manual from one of patronizing/rigid/overly prescriptive to one of flexibility.
06	Eliminate or reduce the "ordering" language--"do this/do that."
06	Change the format somewhat by putting in capital letters a brief order statement which is followed by an explanation of why the writer is doing this (this explanation was in lower-case sentences).
06	Attempt to place more reliance on the intellectual and analytical

powers of the writer himself by giving a brief explanation of the "do" or "order" statement.
06 Rearrange the original order of some of the elements within the manual.
06 Reduce the amount of material that leads the writer to describe the history of the development of a particular program/curriculum.
06 Clarify and add further explanations to sections of the manual that will enable the writer to present clearly some of the more important aspects of a program/curriculum.
02 Conceptualize manual as a checklist-type.
02 Confer with professional writer to gain writer's point of view.
03 Conceptualize instruction manual to utilize loose-leaf checklist.
03 Reconceptualize into one workbook with checklist items, general statements of requirements and guidelines, and examples of style.
05 Test loose-leaf checklist manual while preparing reports for information unit.
05 Test instruction manual by using while preparing reports.
05 Test report manual by team members using it in writing report
06 Judge efficiency of two manuals.
04 Write or produce a draft.
06 Revise (rewrite) the draft based on some of the more legitimate criticisms.
22 Assign a staff member the task of writing or revising the manual.
22 Establish a deadline date for completion of the manual.
24 Review the draft.
24 Edit/critique on the basis of the practicality and usefulness to those who will be using the manual--intended users/target audience.

ENABLERS:

S	UV	
1	07	Knowledge of the ALERT System and materials that were being produced, e.g., cards, summaries, reports.
1	08	Experience in dealing with curriculum materials and programs in trying to write a report and a summary.
1	08	Know ALERT requirements for reports.
1	24	Know how a trained writer operates.
2	14	Skill in writing acceptable reports about developments.
2	14	Skill in professional magazine writing.
3	15	Sensitive to how much latitude a writer should be allowed in order to express himself.
3	13	Sensitive to making writing understandable to public.
3	02	How much guidance a trained writer needs.
1	19	Knowledge of general educational terminology and "inhouse" jargon so can tell when a term or phrase has been invented and/or used only within the agency and should be deleted from the text of the manual.
1	04	Knowledge about learning theory, particularly in the models of cognitive development, e.g., Piaget's formulations about the maturation and development of the intellect; Gagne's hierarchies, etc.
1	01	Knowledge of correct (English) sentence structure and syntax.
2	08	Ability to analyze curriculum or an educational development.

2 18 The ability to judge whether or not a particular approach (specified in the manual) will allow the writer to elicit the necessary information needed to describe an educational program/development.

2 32 Ability to review and edit with some confidence and competence which has been developed through experience and background in educational field.

3 13 Sensitive to the use of language and how educational jargon can hamper understanding.

3 27 Sensitive to esthetic quality of writings.

1 24 Understanding of how much work is involved in writing a report and trying to elicit all the necessary information about a program from the materials/information available and upon which the report is based.

2 14 Ability to write clearly enough so that members outside or on the periphery of the target audience will be able to understand what has been written.

3 30 Sensitive to the audience for which the manual is intended (writers) as well as the eventual users of the reports (public school personnel).

3 16 Awareness of the difference between the goals of a professional writer and the goals of an educator or professional (of any type) who writes; a professional writer seems to be more sensitive to the reader and what he has to know, whereas most other professionals who do some writing are primarily concerned about the material.

3 22 Sensitive to or a keen appreciation for the turn-off point of a reader--a reader can be lost at almost any word, so a professional writer's sensitivities are geared to keeping the reader interested.

3 13 Sensitive to the language that was used in the manual.

P-16: Information Units

"It is a huge box that has some introductory information in it, that is an administrators guide, and in the Elementary Science Unit there are six programs presented. Each program is treated as a report and as a filmstrip. In addition to that, there is an introductory filmstrip to tie the thing together. That is packaged together as a unit. Then there is another box for Individualized Instruction, another for Social Studies, etc." (Note: Information Units do vary in format and not all are multimedia packages. For example, the American Government Information Unit is produced only in a printed format or book form.)

STANDARDS:

J LM

1 11 Program or curriculum development in unit has been reasonably well tested.

1 33	Programs included in units are representative of the various trends within a general subject matter area.
1 11	Programs (educational developments) included in unit have been selected on the basis of stated selection criteria (a number of steps of research and development--needs analysis has been done, prototype, testing, etc.; availability).
1 20	Final product (information unit) has withstood several development/ field testing cycles.
1 06	Approved by user-type people (representative sample).
1 05	Meets user needs for information to assist in decision making.
1 28	Users can operate (use) materials without supervision or explanation.
1 21	All developments have been treated objectively.
1 18	Attractively presented.
1 18	Attractively packaged.
2 04	Completed within time lines.

TASKS:

NO	
01	Identify new programs/curriculum developments in particular subject matter areas by surveying R & D centers, laboratories, journals, and in advertising.
01	If possible, visit teachers who have implemented the new program in a particular school or context.
01	Review the materials of the program, e.g., read instructions to the teacher, examples of lessons within the program in the teacher materials and student materials.
01	Attempt to determine what the classroom pattern of the program is likely to be.
01	Determine how the specific program relates to the context of a movement or trend within the general subject matter area.
05	Classify programs/curriculum developments according to the major trend/movement of which it has some characteristics.
30	Contact the developers for additional information about new programs/ curriculum developments that is not available in the printed information materials.
01	Identify developments by searching journals.
01	Visit one of sites recommended by developer which employs his development.
01	Observe development in operation.
03	Conceptualize A-V requirements to illustrate development (if appropriate).
04	Select developments which meet stated criteria.
04	Write "reports" of developments.
04	Film A-V presentation on site.
06	Revise and reshoot A-V presentation if required.
06	Revise (rewrite) prototype reports if required.
07	Advertise units for sale.
22	Chart time lines for production efforts.
22	Monitor expenditures against budgeted funds.

22 Collect payments for published material.
22 Write progress reports at appropriate time.
22 Write final report (of team responsibilities).
23 Coordinate with potential publishers for mass production and marketing of unit.
23 Contract with publisher to produce according to specifications.
23 Arrange for onsite filming of developments.
24 Agree with developer that his development is adequately described and/or illustrated.
24 Monitor work progress according to time lines.
24 Monitor use of units in field by telephone interview or correspondence.
29 Review prototype A-V presentation with developer.
30 Identify developments by confering with colleagues.
30 Contact developer by phone or correspondence to obtain more detailed information on development.

ENABLERS:

S	UV	
1	06	Knowledge of major trends or movements within the general subject matter area in which one is working.
1	06	Knowledge of the characteristics of these major trends in a general subject matter area.
1	06	Understand the publishing (educational materials) business in terms of the techniques used in selling materials.
1	06	Know the major publisher of a subject matter area.
2	08	Ability to analyze.
2	27	Ability to use some of the current information systems like ERIC.
2	49	Rapport or personal relations skill in working with a librarian.
2	10	Ability to file or organize identified programs and materials.
3	10	Awareness of the hierarchy of cognitive skills within a subject matter area.
1	02	Educational psychology.
1	03	Research methodology.
1	02	Statistics.
1	03	Curriculum development.
1	06	Knowledge of new developments in education.
1	06	Knowledge of trends in education.
2	19	Management capabilities.
2	49	Interact with people effectively.
2	20	Judge effectiveness of a development by observing it.
2	14	Ability to write clearly in terms meaningful to use.
2	32	Ability to edit other's work (writing).
2	19	Ability to visualize A-V presentation of ideas.
2	45	Ability to evaluate your own efforts.
2	39	Ability to construct questionnaires.
2	10	Ability to analyze data.
2	34	Ability to coordinate the efforts of the team.
2	21	Ability to monitor adherence to time lines.
2	42	Ability to involve users in conceptual efforts.
2	11	Skill in treating all developments objectively.
2	22	Skill in budgeting time and money.

2	33	Skill in charting work efforts (PERTing).
2	14	Skill in writing proposals.
2	19	Skill in conceptualizing your own organizations' capabilities in light of recognized national need.
2	08	Ability to read profusely to keep up with correct developments.
3	02	Perceptive of peoples' problems.
3	25	Ability to maintain effectiveness of team of differing kinds of people.
3	03	Sensitive to what users need to know to make decisions.
3	18	Sensitive to not "selling" any one educational development yet promoting results of R & D.
3	38	Sensitivity to priorities of national needs in education.

P-25: 2nd Year Main (Performance) Field-test Plan for ALERT

". . .rewriting sections of last year's test plan to extend it into a two-year test instead of a one-year test as originally planned. This is simply developing tentative plans for procedure next year to test various goals. . ."

STANDARDS:

J	LM	
1	22	The plan provides in implementation the kinds of data necessary to make the specific comparisons designated.
1	17	The proposed data analyses are compatible with the type of data (nominal or interval) generated.

TASKS:

NO	
01	Review statistics books to plan data analysis.
01	Review initial one-year main field-test plan.
02	Discuss with evaluation team member the test sample subjects to get ideas of what testing procedures will be possible with the subjects.
02	Discuss with supervisor the possible different formats for the dissemination system we are building that we will want to test in the field in the second year of our main field test.
02	Determine specific field test goals for second year extension of field test by discussion with evaluation team and supervisor.
03	Think-up procedure to test each goal or objective by data comparisons, such as one-year users vs. two-year users.
03	Set tentative standard for frequency counts--about 80% of the subjects should get scores of 80% or better on questionnaire.

03 Write initial draft of test plan in long hand and have secretary type.
04 Use a memo prepared by supervisor outlining his expectations for the extended field test in writing the extended field test plan.
04 Rewrite test plan two or three times based on comments and suggestions of others from meetings and discussions.
06 Discuss with supervisor and others possible revisions to draft of test plan in one or more meetings.
24 Send typed draft to supervisor for review.

ENABLERS:

S	UV	
1	03	Knowledge of designs that exist such as the quasi-experimental designs in Campbell and Stanley (book) and what kinds of analysis techniques can be used with them.
1	03	Aware of which evaluation/research designs have what deficiencies such that analysis results may be ambiguous due to the nature of the design.
1	04	Have understanding of learning and attitude change to facilitate devising techniques for measuring them.
1	22	Have understanding of information systems--mechanized systems such as ERIC--how they work and their purposes and uses.
1	03	Knowledge of research methods generally used in social sciences.
1	03	Know statistics both parametric and nonparametric most used in social science research and data analysis procedures.
2	12	Able to use computers in data analysis.
2	10	Able to interpret results of testing in sample (depending on how sample was chosen--at random or purposive--and the implications of those results for the total population.
2	10	Able to compute statistical means, standard deviations, correlations, and Chi-square.
2	33	Able to develop testing instruments, especially questionnaires that meet specified testing goals.
2	14	Able to write so that people can generally understand what you are saying and so that it is grammatically correct.
3	24	Anticipating where "testing effects" may occur in a testing program.

C-26: Staff Welfare

". . .tactic has been to give them (staff) responsibility. . .to disperse or diffuse the authority very broadly. . .we have a monitoring system and the task managers report once a month on their activities and progress."

STANDARDS:

J	LM	
2	05	Staff members are able to do their job--they do produce the specified outputs or products.
2	02	Staff members communicate their satisfaction with the job and job conditions.

TASKS:

NO	
22	Give the staff some responsibility(ies).
22	Disperse or diffuse authority on a broad basis.
22	Organize staff into task groups--each staff is responsible for and/or a member of one or more task groups which is headed by a task manager.
25	Uphold/encourage an "open-door" policy--available to talk with staff almost anytime.
25	Plan occasional social get togethers among the staff.
25	If a staff member is unhappy or bored with a particular task or job, attempt to work things out so he/she can move into another position.
26	Distribute some of the "goodies" among the staff, e.g., opportunity to attend a meeting or convention, etc.
27	Attempt to facilitate staff privacy where necessary--for example among the writers.
27	Move the Director's office close to where most of the staff are actually working.
27	Group some staff together in a set of rooms to facilitate interaction and necessary coordination--for example, the production staff.
29	Support or assist staff as much as possible.
29	Conduct management of staff in a very informal, low key style or approach.
30	Set up monitoring system by which task managers report once a month as to the activities and progress of their particular task group.

ENABLERS:

S	UV	
1	28	Understand the kinds of transactional games that go on between and among people.
3	17	Aware of the structure of staff personalities.
3	18	Understand elements like ego strength, threat, etc. and the implications of these elements in a situation where people are working and interacting with one another.
3	30	Sensitive to the notion that most people like to understand how their job contributes to the whole.
3	03	Sensitive to the notion that when a person produces something he likes to feel as if someone recognizes his efforts.
3	03	Sensitive to the notion that most people want to be respected as human beings and that one is interested (not necessarily in agreement with) in their ideas.
3	02	Sensitive to individual staff problems outside of his work, e.g., family problems, etc.).

3 03 Sensitive to the notion that most people like to know that you will talk to them about something besides business occasionally.

C-54: Staff Morale

"You have to be loyal to your people if you're going to allow them freedom in their work. You have to stick behind them because you then are ultimately responsible for any mistake or mishap. . ."

STANDARDS:

J	LM	
2	18	People hired to staff team are chosen by team leader.
2	46	Staff have freedom and independence to determine own work schedule.
2	25	Work responsibilities are mutually agreed to between team leader and team member.
2	25	The staff members trust each other.
2	33	The staff members are learning new things on the job that contribute to their vocational progress.
2	44	Staff willingly accepts responsibility for their work.
2	45	Staff effectively uses resources of time and money in getting work done as measured by comparison of what is produced against amount of time used and budget expenditure.
2	10	Staff members participate enthusiastically and are "involved" in staff meeting.

TASKS:

NO	
21	Hire people that (I) want to work with.
22	Depend on staff to regulate own schedules to be at work and complete work in reasonable amount of time.
24	Talk with staff member about problems when work is not satisfactory.
25	Give my staff as much freedom in their work as possible by not imposing an overly strict time schedule.
26	Provide feedback on adequacy of staff members work (reports) from what is known of higher management's expectations in their work.
26	Provide a general nonauthoritarian approach to supervision of staff because fits personal style.
25	Sort of preach to my people that they are the most important thing in this business.
25	Handle personnel problems that can not be dealt with at the team or component level by discussions with all staff involved, both one to one and in group.

26 Take considerable time to make sure new senior staff member (new program/project director) will get answers to his questions as quickly as possible by personally briefing and assisting him and by having other staff do the same.

33 Decide on appropriate action to be taken on personnel problems after discussions with staff involved.

ENABLERS

S	UV	
1	21	Knowledge of management procedures with small groups.
1	28	Knowledge of interpersonal relations and small group dynamics.
2	34	Skill in personnel supervision from management or business point of view.
2	29	Skill in counseling with a staff member concerning problems in work quality or quantity.
3	37	Willing to give to staff responsibility for doing tasks and not worry about it.
3	58	Loyalty to your staff to support their work when you allow them much independence in their work.
1	10	Knowledge of people working in an R & D setting gained through 17 years experience in production and management in educational R & D.
2	02	Able to build and maintain mutual respect among staff.
2	05	Able to chart a task or work activity against a time line but only to the degree appropriate to the work so that the time line is facilitating of production and not an end in itself.
2	34	Able to keep staff work progress reasonably close to schedule and budget expenditures within limits, but not emphasizing these to the point that they are overly restrictive.
3	37	Allow staff to do some things their way even though may disagree--not always insisting on my way in doing something.

E-55: Meeting of ALERT Staff to Discuss a Publisher's Proposal

"At that particular meeting there were about 10 of us there. We had been sent a memo on the RFP (request for proposal) before the meeting. . . During the meeting we went around the room and each person commented on the RFP as interpreted in the memo. . .the meeting finished in a discussion, primarily among the senior staff, of the feasibility of accepting the proposal or extending the main field-test for another year. . .the decision that came out of that meeting was to extend the main field-test."

STANDARDS:

J	LM	
1	22	Discussion in the meeting is relevant to the stated purpose of the meeting.
	08	Anyone with something to say that is relevant, is listened to.
2	28	Decisions reached are agreeable to the majority of the staff in the meeting.

TASKS:

NO	
01	Read RFP to determine its feasibility in cost.
01	Review cost survey data recently collected in main field test of project.
01	Review all evaluation data received to date in the main field test of project to give oral summary in meeting.
02	Discuss with supervisor what input must be provided for meeting.
05	Provide interpretation in meeting of adequacy of cost estimate figure in RFP against cost survey data--estimate figure too high or too low against what survey indicates potential purchasers will pay for product.
24	Argue feasibility of accepting RFP and advisability of extending main field test against field test data available to date.
24	Write-out comments concerning costs from review of RFP and from cost survey data.
31	Make oral presentation in meeting of evaluation data summarizing cost data and other data available.

ENABLERS:

S	UV	
1	10	Able to quickly interpret data available against specific questions raised in meeting.
1	10	Awareness of who are the primary decision makers in a group and their style--authoritarian, nonauthoritarian--in a grave situation.
1	15	Able to summarize field test data quickly and effectively in an oral presentation for decision making.
1	19	Able to anticipate the kinds of data that a certain meeting will require beyond what may be specifically requested before hand.
1	28	Knowledge of leader orientated small group dynamics, especially goal directed groups.

C-56: Conceptual Leadership for Project

"You conceptualize what you are doing and you continually go back and reconceptualize it and try and include a number of people in. . .doing that. There is lots of oral discussion that eventually gets committed to paper."

STANDARDS:

J	LM	
2	33	Staff can expand and extend initial conceptualization greatly beyond what is asked of them.
2	26	Staff generates project papers that evidence understanding of concepts of project.

TASKS:

NO	
21	Point out to staff areas of project that have not as yet been planned out but that are essential to the development and/or dissemination of the product(s) of the project, ask that work be started.
23	Obtain for project, recognized experts who supply technical consultation, advice, and critique of project.
24	Maintain commitment to being systematic, following outlines as baselines, insisting on concept papers and using outside consultants.
24	Edit documents written by staff for accuracy and clarity of interpretations.
24	Monitor work progress, directions, and ideas formally by regular staff meetings and informally by chance meetings or going to their offices when time permits.
25	Encourage staff to use knowledge base available and to be as rigorous as possible in their work through frequent interaction with the Director or his assistants.
26	Send senior staff to professional meetings to represent and present project.
26	Critique ideas of senior staff (usually informally) in one to one meetings, from experience base in educational R & D, concerning feasibility of developing an idea and maintaining alignment with general program goals.
31	Make input to proposal concerning plans and design of proposed project.
32	Write short document outlining objectives and intended interfaces of project product in response to a special request from a government agency.
33	Challenge staff in meetings, by memo, or chance discussions to contribute in some way to conceptual design and planning of project.

ENABLERS:

S UV
1 03 General experience based knowledge of educational RDD&E both in production and management.
1 25 Know where to look for help in management of educational R & D, especially in military and civilian industry with many years experience in R & D.
2 08 Able to read large amounts of printed matter quickly.
2 05 Able to be selective in plotting time to tasks by importance of task as reflected by the long-range and daily needs of a project.
2 49 Able to interact intellectually with all staff either one to one or one to group.
2 23 Effective in defense of ideas and in persuasion with staff or others both orally and in writing.

E-57: Staff Hiring

". . .inherited most of the staff I have now. But we do go through an elaborate procedure of specifying what the job entails, the qualifications we'd like, and salary range."

STANDARDS:

J LM
2 36 Candidate is intelligent.
2 36 Depending on the specific job, candidate has a talent for writing.
2 36 Candidate has some commitment to the job or general area/field relative to the job.
2 36 Candidate's credentials reflect indicants of responsibility.

TASKS:

NO
21 Determine whether or not it is necessary to fill a staff vacancy.
21 Review program plans and production and relate to the current balance in the staff.
21 Develop a job description for the vacancy.
21 Process the necessary papers relative to announcing a vacancy.
21 Post the vacancy within the agency.
21 Interview potential candidates inhouse.

21	Interview potential candidates from outside of the agency.
21	Select candidate to whom a job offer will be made.
21	Confer with other colleagues as to their opinion about hiring a selected candidate.
22	Determine whether or not there is enough money in the budget to request that a job/staff vacancy be filled.

ENABLERS:

S	UV	
1	10	Know inhouse selection and hiring processes and policies.
2	20	Ability to make decisions.

P-58: ALERT System

"The information units were our first generation information system. The idea was to package information in selected subject areas. . .As we were developing these units we felt that they were too confining in that they dealt with only one subject area. We wanted an information system that was more comprehensive and global, then users could choose among various subject areas for things they might want to look at. So the second generation information system was conceptualized and started, and that is ALERT. It will absorb all the work done in information units."

STANDARDS:

J	LM	
1	12	System has achieved its objective(s)--based on field-test data/information.
1	29	All the problems that have been considered in the earlier stages have been solved and the system is ready for a mock-up.

TASKS:

NO	
01	Read the original conceptualization (paper).
01	Read (staff/inhouse) reports of the field test to determine what has been learned.
01	Read the literature relative to dissemination and diffusion of information.
02	Reconceptualize the entire system.
04	Mock-up the system (or elements of) after conceptualization has been somewhat stabilized.

05 Conduct preliminary field-test--of the mock-up.
05 Conduct main field-test--of the mock-up.
23 Invite several consultants to participate in a discussion relative to the ALERT System.
24 Write notes as the original conceptualization is read.
24 Survey the attitudes of the staff that work in developing the system to determine where the problems are and what might be an effective solution.
24 Review a particular part of the system by asking as many questions about that part/element as one can think of.
29 Consult with persons who have been involved with the field test to obtain their reactions.
29 Discuss with staff to obtain their reactions to various approaches that we might utilize in the development and design of the ALERT System.
31 Develop a set of questions upon which the discussion with (outside) consultants would be based.

ENABLERS:

No information collected under this heading.

Appendix B: The Product-development Strategy of the Far West Laboratory for Educational Research and Development

The development and evaluation procedures of ALERT basically follows the general development strategy of the Laboratory. That general strategy, as it appears in the Contractor's Request for 1971 Funding, follows:

> The Laboratory product-development strategy has been described in a number of publications over a period of time as a specified number of stages and steps. The number of stages and/or steps utilized by various programs in implementing this strategy can and does vary. Very generally, the strategy includes ten stages.
>
> Stage 1, conceptualization and planning, includes need definition, a thorough review of the research literature and practices that seem to be relevant to the particular needs and problems on which the program or component is focused, a detailed statement of objectives to be achieved through the use of the product, and preparation of initial specifications of the product. It should be emphasized that insofar as possible, the product-development work of the Laboratory has a firm foundation in available education, psychological, and sociological research.
>
> Stage 2, preliminary product development, represents all the work necessary to create the first form of the product. All the ingenuity and creativity of the staff is brought to bear on the development of what appears to be the most useful product. Frequently non-Laboratory participants and school personnel are consulted in the development of the preliminary product; certainly such development is more than just putting together a number of pieces or ideas that others outside the Laboratory have tried out. This stage terminates with the decision that the preliminary product is sufficiently well defined and developed to merit testing. For some products, this preliminary product development may be quite complex, and may include a major portion of the development effort; in other instances the preliminary product may be only a very rough approximation of a final product.
>
> In Stage 3, preliminary field testing, the product is tested for its feasibility as an idea. The evaluation is most often conducted using relatively small numbers of representatives of the intended target audience who are acquainted with the problems to which the product is directed. The participants in this preliminary field test, or feasibility test, are generally given the opportunity to respond freely to questions posed by the staff, as well as to draw attention to problems or questions not previously identified by the staff.

In Stage 4, *preliminary product revision*, any necessary changes to insure the effective use of the product in actual school use are made. Decisions about the changes to be made are based on the evaluation judgments and suggestions made by non-Laboratory participants and the experiences and observations of the staff in the preliminary field testing stage. Occasionally, these revisions may be so extensive that they amount to a virtual redesign of the product, necessitating a second preliminary field test.

In Stage 5, *main field testing*, the product is tested, using larger samples of representatives of the intended audience in actual working situations. The evaluation is conducted quite systematically and is designed primarily to provide information on the product's effectiveness in achieving the states objectives. The main field test is also used to identify ways in which parts of the product might be improved. Generally the staff responsible for the development of the product is actively involved in the field test as observers of the process and as coordinators of the field-testing activities of the participants. An additional purpose of this main field test is to identify points at which the users of the products need more, or more specific, directions for product-use to insure its effectiveness. Following the main field test, decisions are made about possible modifications of the product necessary to correct any deficiencies identified during the evaluation. If the revisions in the product which are made in Stage 6 are quite extensive, the main field test may be repeated to determine the effectiveness of the revised product.

Stage 6, *main product revision*, usually involves minor modification of the product and the development of auxiliary materials necessary to insure that the product will be entirely self-sufficient when put into operational use. As noted above, occasionally the product revisions are so extensive that a second main product test (Stage 5) has to be conducted.

In Stage 7, *operational product testing*, the materials and processes which constitute the product are tested in actual use in classroom or school situations without the participation of the staff responsible for the product's development; that is, the product is tested in the completely realistic setting for which it is ultimately intended. The primary purpose of the operational test is to determine if the product can be used widely in schools without the active intervention or participation of the staff. This phase is crucial in the development and definition of a product, because the Laboratory cannot and does not with to provide a service function in connection with its products. Rather, the goal of the Laboratory is to produce completed products which have been thoroughly tested for use by school personnel without any active participation by the Laboratory staff.

Stage 8, *operational product revision*, includes the correction of the minor deficiencies discovered in the operational test. It may also include those revisions judged by the potential product distributor as essential for adoption by schools, provided they will not in any way reduce the effectiveness of the product.

Stage 9, *dissemination planning*, usually requires widely varying amounts of time and effort depending on the nature of the product. Work on this stage often is initiated simultaneously with Stages 5 or 6 and is ordinarily the joint responsibility of the appropriate product-development program staff and the General Dissemination Program staff. The work generally involves identification of and negotiation with an outside distributor for production and distribution of the final product; occasionally it may involve production of the final product by the Laboratory. This stage is terminated after Stage 8, when arrangements for efficient product distribution have been completed.

Stage 10, *product dissemination*, is an open-ended period during which the developed products are being distributed on a large-scale basis to school users. The General Dissemination Program has almost complete responsibility for this phase, with the product-development staff involved only in a periodic monitoring role to insure that the products are still effective in accomplishing their objectives and that they are generally being used in the way for which they were designed.

Appendix C: Primary Information Products of the ALERT System

The prototype ALERT System, at the time of observation (June 1971), was delivering the following products.

1. Sort cards: An index of several hundred exemplary projects and programs developed throughout the country. The cards are packaged in a small "recipe box." Each card represents a single program or serves to refer the user to other information sources. Cards are indexed by categories such as grade level, subject area, ability level, and target audience. Basic information about a program is printed on both sides of the card. A brief description or "abstract" is on the back of the card. The cards are edge-punched for hand sorting.

2. Summaries: A chart-like, descriptive pamphlet per program that accompanies the cards. These are also packaged in a "recipe box." These supply the level of information neccessary for initial decisions about the suitability of a program for a specific school or need.

3. Reports: A detailed description of each major program. Not all programs included in the Sort Cards or Summaries are treated in Reports. Only those programs that are complex and/or highly significant are treated in this manner. The Report supplies detailed information on goals, objectives, content, materials, teaching strategies, implementation requirements, cards, and evaluation of the program.

4. Audiovisual Briefings: A Filmstrip/tape presentation per program or programs that require extensive interpretation to lay audiences, are so significant that large groups would be involved in reviewing them, or are of such a nature that a visual presentation is the most appropriate.

5. Review of Trends: An analysis of major trends and issues involved in a select subject area; outline of alternative sets of goals, objectives, or criteria involved; description of selected programs or projects that exemplify the trends; and listing of resources, materials, consultants, and planning guides that may be used in planning one's own program if no suitable program can be located or adapted. This ALERT product is developed in subject areas where few programs or developments may exist or where the problems of selecting a program are complex.

66/67

6. Information Units: A package unit of information in a selected subject area such as Elementary Science. The unit can contain summaries, reports, and audiovisual briefings, as well as review of trends. Depending on the subject area, the format and the media of the unit vary as appropriate to that subject.

CASE PROFILE NO. 17

Written by

Norman H. Crowhurst

PROJECT TITLE: Paul L. Dunbar Community Learning Center

(DUNBAR Project)

AN EDUCATIONAL DIFFUSION PROJECT CONCERNED WITH: Installing educational programs adapted to the specific needs of the population served by the Dunbar Learning Center, insuring optimum performance in the generation of learning thereby, and providing for their further diffusion to other centers with the aid of products generated in the process of their installation.

A PROJECT OF: Dallas Independent School District
3700 Ross Avenue
Dallas, Texas 75204

This profile has been prepared according to

PROFILE FORMAT No. 3

Three profile formats are represented in this volume. The reader should refer to this number when making use of the reader's GUIDE to the profiles.

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Chapter I: Overview

This chapter contains a narrative introduction to the Paul L. Dunbar Community Learning Center Project, including the objectives, rationale, and significance of the project and the context in which it operates.

Synopsis of the Project

Title: Paul L. Dunbar Community Learning Center.

Responsible Institution: Dallas (Texas) Independent School District.

Funding Source: H. Ross Perot Foundation.

Funding Duration: July 1969 to June 1972. (36 months)

Observation Date: April 1971.

Stage of Development: Mid-Project.

RDD&E Focus of Project: Educational diffusion.

Expected Outcomes:

1. Replicable curricula with the means to adapt to individual local situations and the necessary instrumentation to optimize utilization of innovative programs.
2. Packages to facilitate the replication of curricula and the development of staff in their use.
3. A method of securing parental and community involvement justifying the designation of the center as one of community learning.
4. Packages to facilitate the replication of similar involvement at other centers.
5. Pupil personnel services appropriate to the support of such a center.
6. Packages to facilitate the replication of similar support services at other centers.
7. Service to facilitate and develop the replicability of each of these other products at other centers.

Level of Funding and Duration: High-Medium. (level 6 of 7 levels)

Agency Setting: Large-city public school district.

Number of Personnel Assigned (current):

Professional - 36
Support - 9

Objectives, Rationale, and Significance of the Project

Objectives.

1. To pilot test, evaluate, adapt, and demonstrate a personalized total learning system for economically and educationally deprived students that is more cost effective than the existing learning system.

2. To facilitate the total learning commitment by establishing and demonstrating a parental and community involvement associated with the demonstration center.

3. To initiate the ability to diffuse the benefits accruing from the system to other schools and learning situations throughout the city, state, and nation. Programs reaching installation stage in the Dunbar School are communicated to other schools within the school district to verify the adequacy of materials and service provided in replicating the program.

4. To establish sources of innovative programs and materials to be utilized within the total learning system.

Rationale. Educational policy-making bodies agree that educational reforms should respond in viable ways to the most pressing problems of disadvantaged ethnic and socio-economic groups. Recent research and experience in developing promising innovations strongly suggest that each major segment of the community within which the school rests should be appropriately involved in planning and implementing any innovational changes.

Individual research and development institutions tend to focus on areas of specialty, and seldom address their efforts to determining the most cost-effective approaches. It is believed that a successful school system providing a total learning environment must combine the best of all these innovative developments, doing so in the most cost-effective manner within the context of the school's operation.

Further, as repeatedly elicited during the interviewing on the project, the precise needs and situations relevant to disadvantaged ethnic and socio-economic groups vary from district to district. The needs of the people within the Dallas School District are unlikely to be identical to those found elsewhere, and, indeed, every locale will exhibit different needs which a total learning system must take into consideration.

Thus, an essential part of the success of this program rests in its adaption to the precise needs of the local school population. In developing the means to make that adaption in this specific learning center, the mechanism is at the same time produced that will enable ready adaption to occur at each later environment to which the same material is to be applied (i.e., the satellite schools within the same district), some of which may address the same ethnic group, some other deprived groups, and finally outside this district, as the diffusion method adapts the program progressively across the whole system.

Frequently, in the interviewing, an interviewee would make reference to some activity, attitude, reaction of the student, etc., as being a feature associated with deprived groups or populations, where upon reflection it appeared that the same principles apply with equal validity to any student population, deprived or not. Thus, while the groups who may have been deprived on the basis of ethnic discrimination may be the first to benefit from the advantages accruing from this program, it has implications that can benefit education in all contexts, many of which would not generally be viewed as deprived.

Significance. Basically, this project represents a large-scale, inhouse diffusion effort for innovative educational developments, and the adaption of these innovations to the characteristics of the district serves as a major vehicle for the effort. In determining the effort's significance, it would be a mistake to quote only statistical figures as evidence that something worthwhile is happening at the Dunbar Center. Such figures do indicate success for this project, but another more immediate and convincing indicator results from a visit to the center. In visiting the center, one is more likely to feel and to witness the enthusiasm existing as a significant aspect of this project's success than if only the statistical figures representing the data were observed.

Important also to this project's success is the role change for the school as observed by the community it is serving. Where the traditional school was felt to have made little educational difference to the community, the "learning center" is seen as more accessible and more mindful of the needs of the people, as observed by the community in which it is located.

Context in Which the Project Operates

Relationship to the parent agency. The parent agency is the city-wide school district. The district office negotiates all funds for the school, both for the functioning of the school and for the operation of this specific project. Thus, the Project Director within the parent agency is fiscally responsible for the project's continued funding, but it is the Principal of the school who is the functional Director of the project in the school setting. He is responsible for what happens within the school.

It is important to note that this is an operational setting. It is dynamic and ongoing, not just funded as a one-time effort to be concluded with a final report.

Relationship to the funding sponsor. The funding agency, the H. Ross Perot Foundation, closely monitors reports from the project. The contractual details are flexible enough that if a demonstrably cost-effective addition to a program within the project is put forward, the funds are usually quickly forthcoming.

Relationship to innovative program sources (publishers and labs). The project has worked out agreements with providers of source materials to furnish them with feedback from the project on a cost-shared basis. This includes an agreement for profit-sharing if any proceeds from the project accrue as it is diffused into other districts.

Relationship to initial diffusion locations (satellite schools). Nine schools are presently designated as "satellite" schools for further trials and adaptation of specific programs being installed at the Dunbar Center. These are presently within the same parent agency's jurisdiction, and thus are part of the same general program. However, the Dunbar Center provides these satellite schools with materials and advisory services, as will be described in the reporting of this project.

These contextual relationships are depicted in Figure 1.

Supporting and technological services. Various consultants in statistical methods, research design, and subject matter areas, are made available through the parent agency along with data-processing facilities. Materials connected with innovative programs are made available on a cost- and profit-sharing basis with cooperating laboratories and publishers.

Physical/environmental setting. There is, as might be expected, a contrast between the modern, air-conditioned suites of offices occupied by the agency, and the school setting in which the work of the project takes place. The latter, however, is seen by those involved as a tremendous improvement over what the same facility previously had been.

In the way the school facilities were used, they seemed quite adequate. Students were not operating in overcrowded conditions. The building, though old, was well maintained and had been renovated in many places to provide better facilities than it formerly offered. The only criticism heard about the facilities was that they lacked air conditioning, which certainly would be conducive to comfort in that climate. It was observed that, while some members of the staff visibly perspired at their work, they maintained a high degree of enthusiasm for what they were doing, which suggested that the lack of air conditioning did not seriously detract from their efforts.

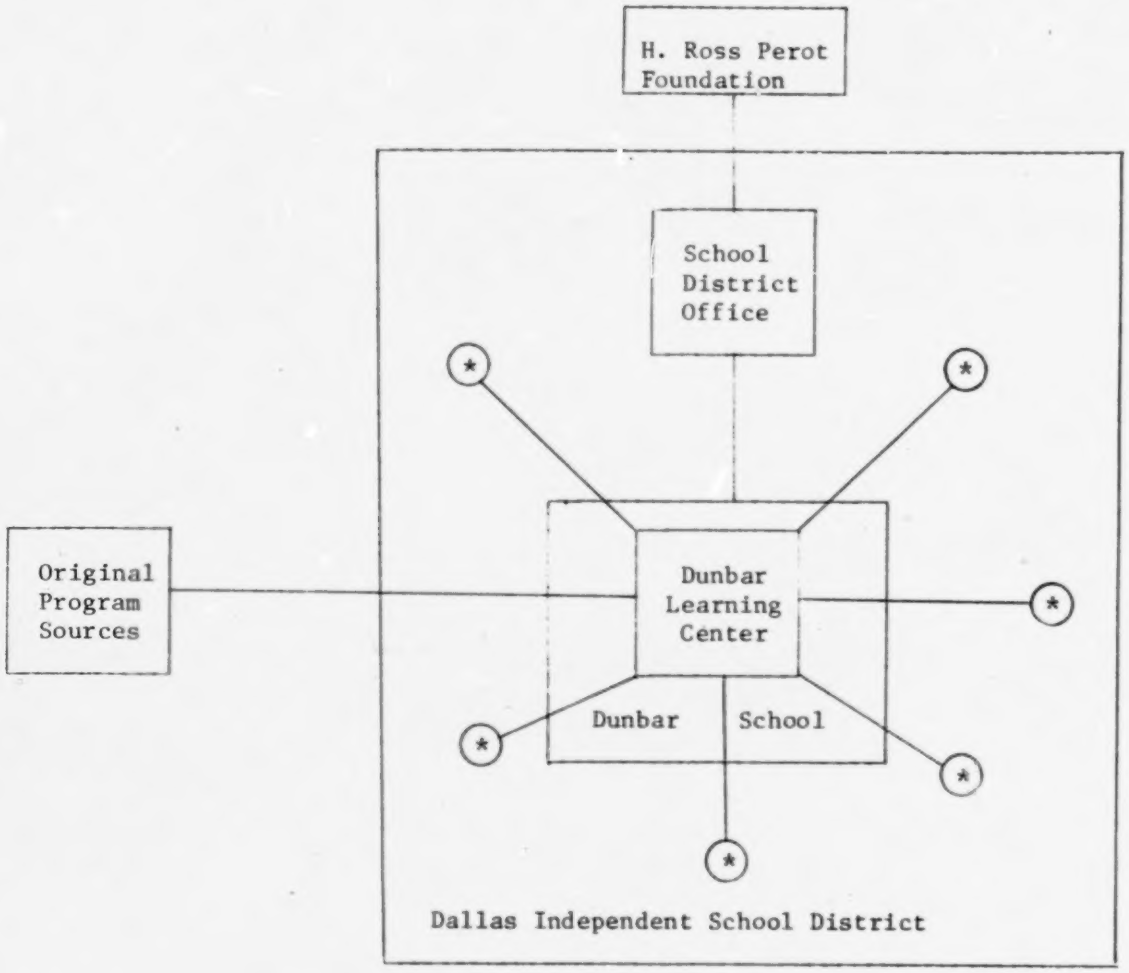

H. Ross Perot Foundation
School District Office
Original Program Sources
Dunbar Learning Center
Dunbar School
*
Dallas Independent School District

FIG. 1. Contextual map. The number of *satellite schools varies at any one time, subject to activity in the proceeding of the overall program.

Chapter II: Parameters of the Project

This chapter discusses the functional structure of the Dunbar Project and describes the outputs being generated.

Project Structure

Figure 1 is a contextual map that illustrates project-context relationships. The core of the project is the Dunbar Learning Center located at the Dunbar School. Supervision and direction come from the school district office. The center works primarily with innovative programs obtained from outside sources, which it modifies and/or adapts to the specific needs of the population served by the district, and in particular the students within the Dunbar Center. After a first round of development, these same programs are then extended into general classroom use within the Dunbar Center and later out into satellite schools within the same school district.

Figure 2 is an organization chart of the Department of Research and Development within the school district, indicating the services within this category that are made available to all schools in the district as required.

Figure 3 is the functional organization chart for the Dunbar Learning Center, divided into two major headings: learning functions, and research and development functions.

Figure 4 illustrates a partial detailing of programs on which the center is working. This is broken down to indicate the age or grade level range through which each is operative.

Figure 5 is a similar, partial time line chart indicating the progressive installation program planned for this and future years.

Figure 6 is a model for the evaluation system flow chart forming the basis for the development and evaluation employed in this project.

Figure 7 represents a more detailed organization chart for the Learning Center, from which the organizational structure within the center is clearly seen.

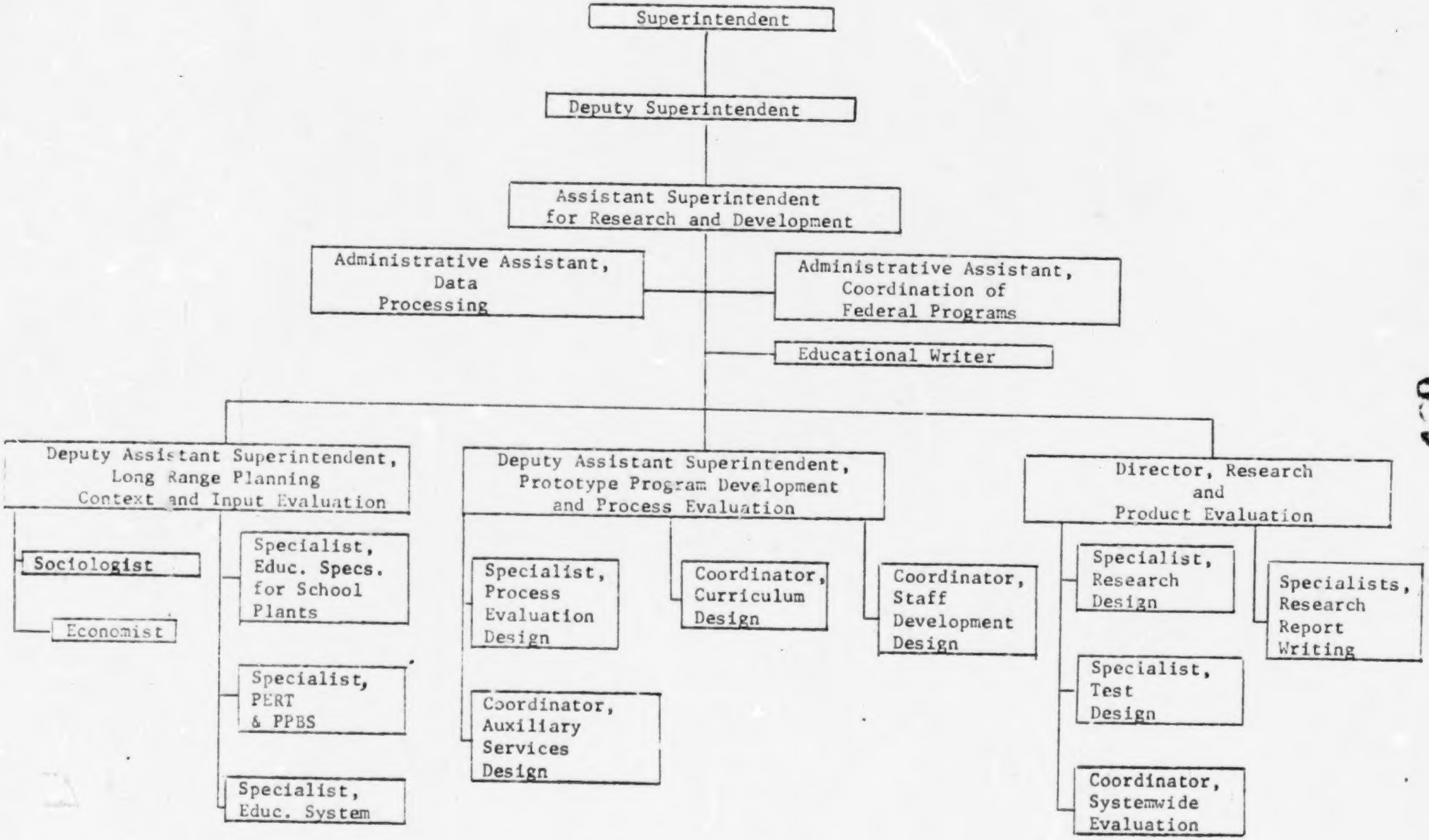

Superintendent
Deputy Superintendent
Assistant Superintendent for Research and Development
Administrative Assistant, Data Processing
Administrative Assistant, Coordination of Federal Programs
Educational Writer
Deputy Assistant Superintendent, Long Range Planning Context and Input Evaluation
Sociologist
Economist
Specialist, Educ. Specs. for School Plants
Specialist, PERT & PPBS
Specialist, Educ. System
Deputy Assistant Superintendent, Prototype Program Development and Process Evaluation
Specialist, Process Evaluation Design
Coordinator, Auxiliary Services Design
Coordinator, Curriculum Design
Coordinator, Staff Development Design
Director, Research and Product Evaluation
Specialist, Research Design
Specialist, Test Design
Coordinator, Systemwide Evaluation
Specialists, Research Report Writing

FIG. 2. Organizational structure for the department of research and development, DISD.

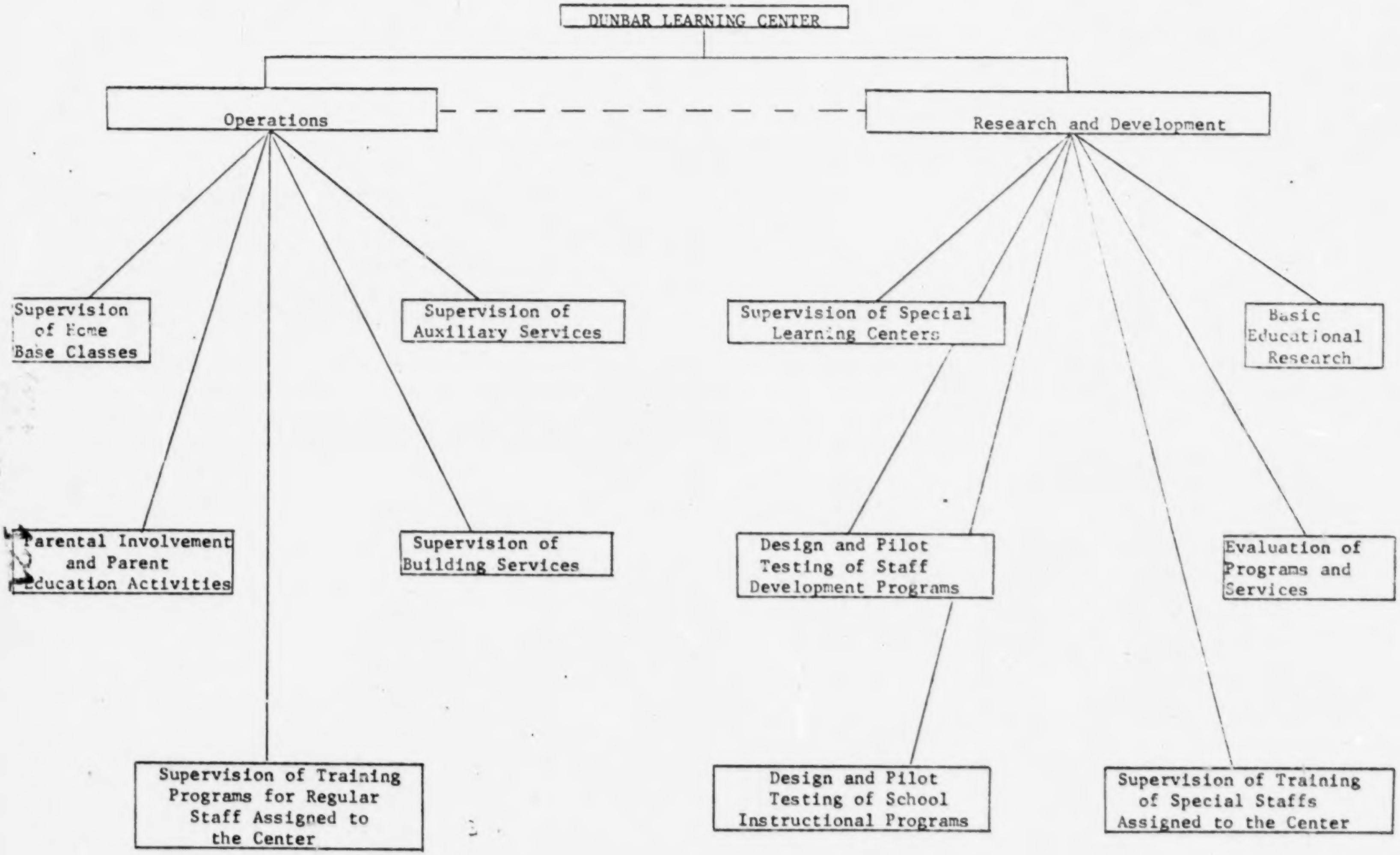
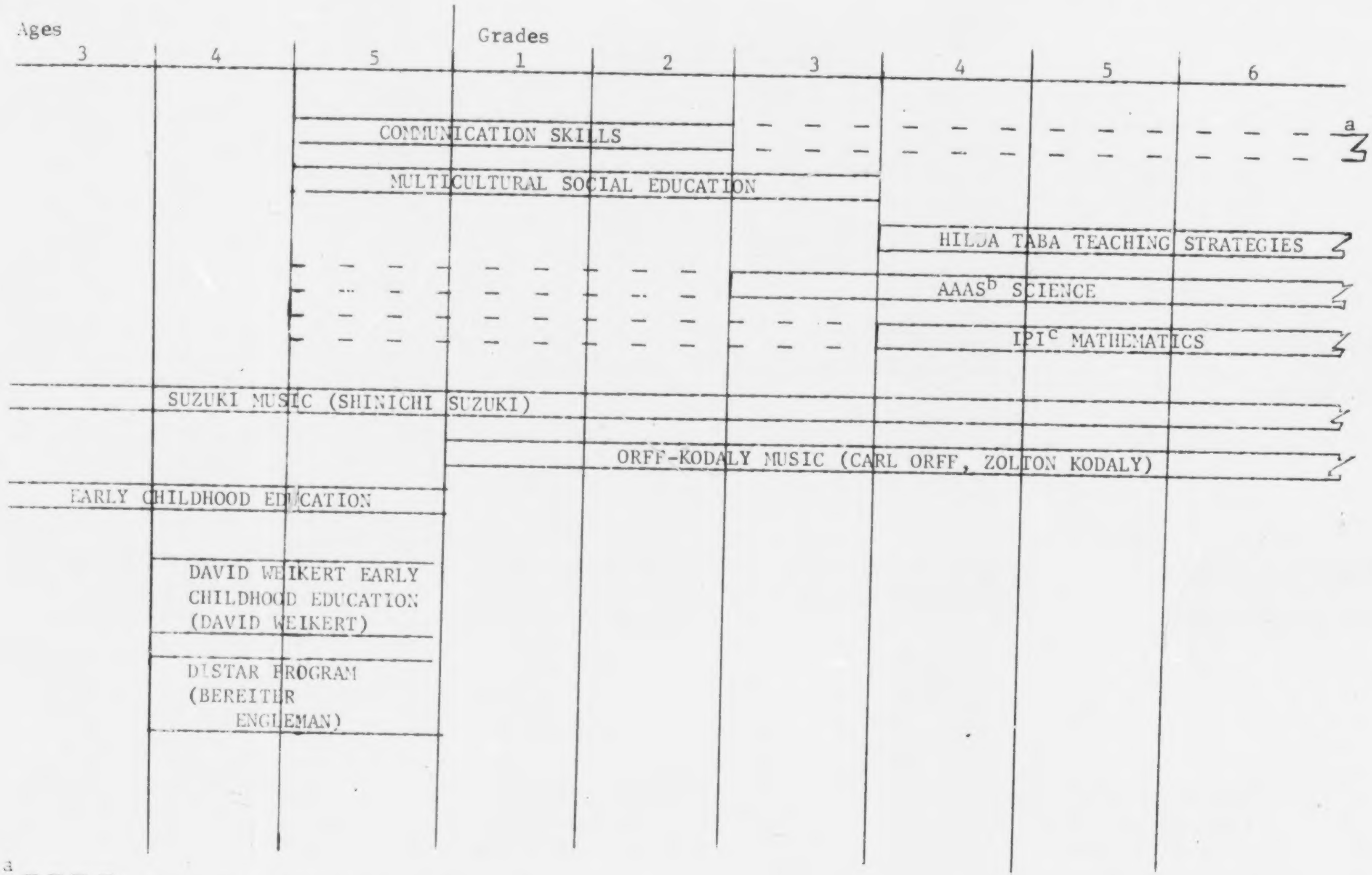

DUNBAR LEARNING CENTER
Operations
Research and Development
Supervision of Home Base Classes
Parental Involvement and Parent Education Activities
Supervision of Training Programs for Regular Staff Assigned to the Center
Supervision of Auxiliary Services
Supervision of Building Services
Supervision of Special Learning Centers
Design and Pilot Testing of Staff Development Programs
Design and Pilot Testing of School Instructional Programs
Basic Educational Research
Evaluation of Programs and Services
Supervision of Training of Special Staffs Assigned to the Center

FIG. 3. Organizational structure for the Dunbar Learning Center.



[a] Proposed extension to other grades.

[b] American Association for the Advancement of Science.

[c] Individually Prescribed Instruction.

FIG. 4. 1970-1971 program operations.

	1970-71	1971-72	1972-73	1973-74	1974-75
COMMUNICATION SKILLS					
Dunbar Pilot Testing	K,Gr.1+2	K,Gr.1+2	K,Gr.1-6		
Extended Pilot Testing	K,+Gr.1*	K,Gr.1+2*	K,Gr.1-6*		
Program Installation		K,Gr. 1	K,Gr.1+2	K,Gr.1-6	
Pupils and Teachers Served	600-28	900-42	1400-62		
MULTICULTURAL SOCIAL EDUCATION					
Dunbar Pilot Testing	Gr.1,2,+3				
Extended Pilot Testing	Gr.1+2*	Gr.1,2,+3*			
Program Installation		Gr.1+2	Gr.1,2,+3		
Pupils and Teachers Served	600/28	900/42	1200/56		

*Installation Packages Completed

FIG. 5. Detailed products development schedule.

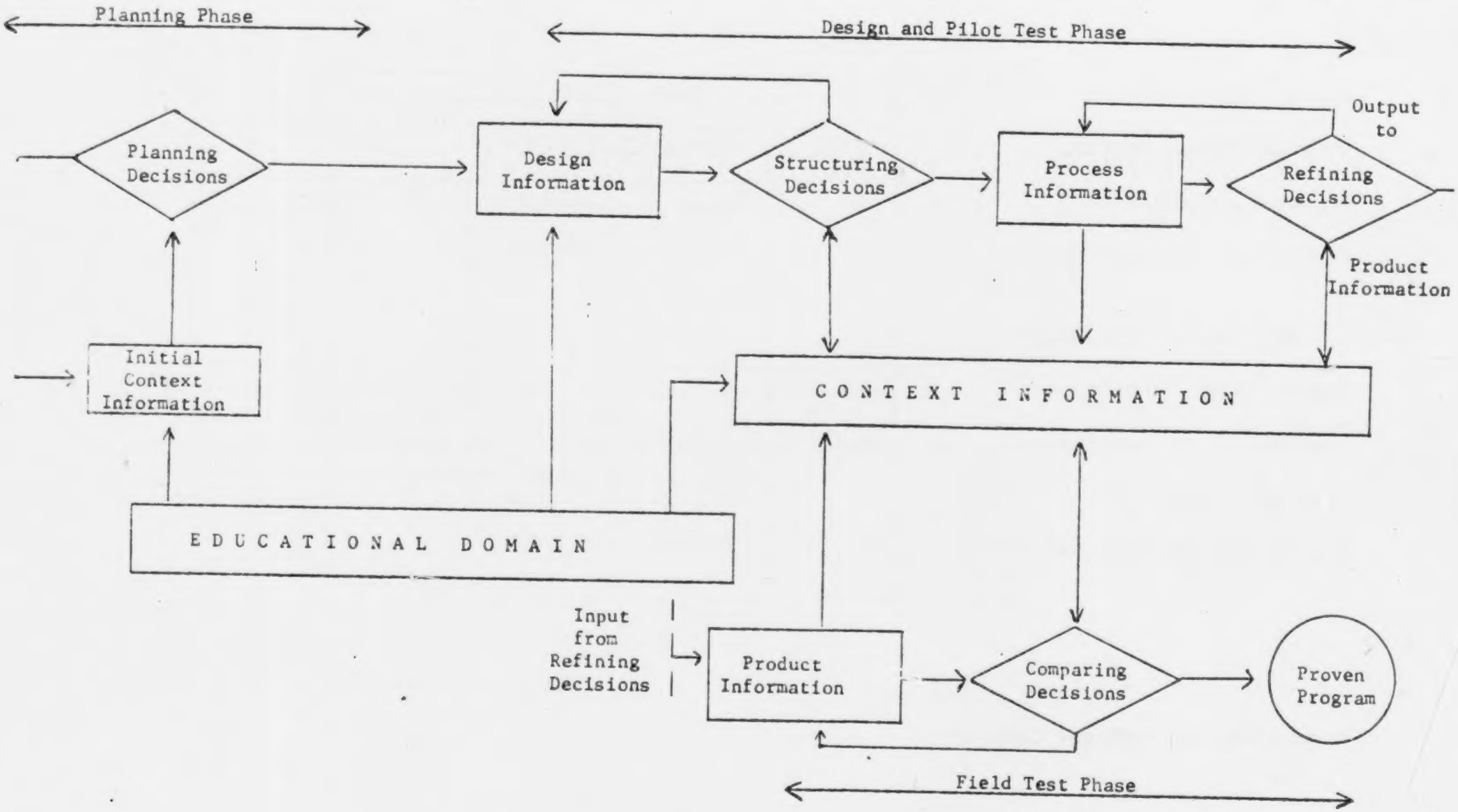

Planning Phase
Design and Pilot Test Phase
Planning Decisions
Design Information
Structuring Decisions
Process Information
Refining Decisions
Output to
Product Information
Initial Context Information
CONTEXT INFORMATION
EDUCATIONAL DOMAIN
Input from Refining Decisions
Product Information
Comparing Decisions
Proven Program
Field Test Phase

FIG. 6. CDPP evaluation system flow chart. Context, Design, Process, and Product Evaluation (CDPP), developed by Southwest Educational Development Laboratory, based on work of Daniel Stufflebeam of Ohio State University and Egon Guba of Indiana University.

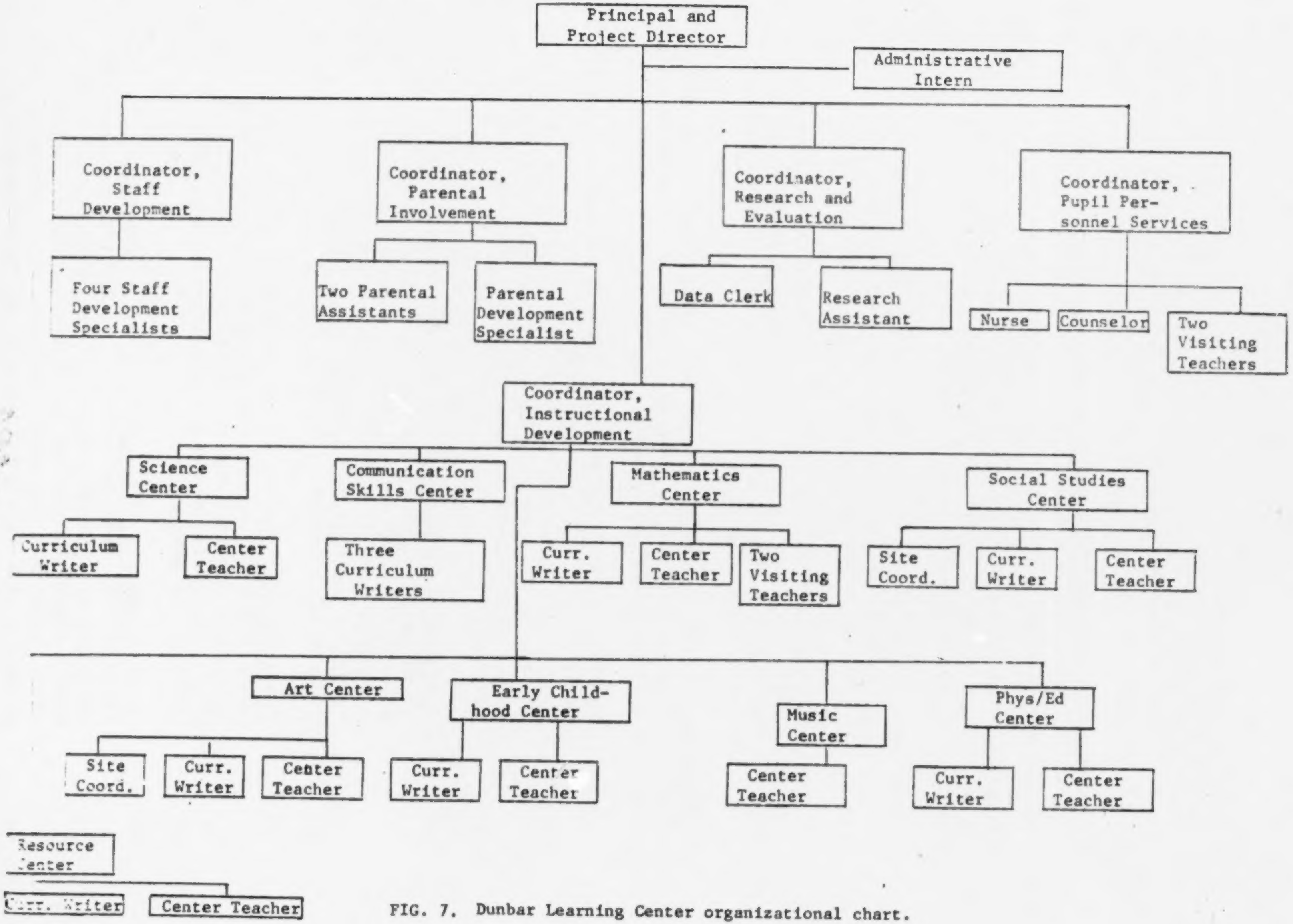

Principal and Project Director
Administrative Intern
Coordinator, Staff Development
Four Staff Development Specialists
Coordinator, Parental Involvement
Two Parental Assistants
Parental Development Specialist
Coordinator, Research and Evaluation
Data Clerk
Research Assistant
Coordinator, Pupil Personnel Services
Nurse
Counselor
Two Visiting Teachers
Coordinator, Instructional Development
Science Center
Curriculum Writer
Center Teacher
Communication Skills Center
Three Curriculum Writers
Mathematics Center
Curr. Writer
Center Teacher
Two Visiting Teachers
Social Studies Center
Site Coord.
Curr. Writer
Center Teacher
Art Center
Site Coord.
Curr. Writer
Center Teacher
Early Childhood Center
Curr. Writer
Center Teacher
Music Center
Center Teacher
Phys/Ed Center
Curr. Writer
Center Teacher
Resource Center
Curr. Writer
Center Teacher

FIG. 7. Dunbar Learning Center organizational chart.

Outputs Generated

Index of outputs. The outputs which were identified are briefly described here. Outputs are defined as identifiable and significant planned outcomes (product, event, condition) of targeted work activities, with targeted work activities being actions directed toward the realization of projected goal states. An arbitrary identification number has been assigned to each output consisting of a numeral and a letter. The letters P, E, and C represent product, event, and condition which are defined as follows:

Product:	A tangible or "hard" outcome of work effort that survives in a form that is transportable, such as a report.
Event:	An outcome of work effort that results in the occurrence of an observable transaction, such as an interview.
Condition:	An outcome of work effort that results in the creation of a desired circumstance, such as fiscal responsibility.

In this project, conditions are seen as the keystone elements and are identified first, followed by events and then by products. An asterisk (*) preceding the output identification number indicates that the output was interviewed around.

Conditions. The following conditions were identified as outputs of this project. Each of them has the same major focus as the whole project--diffusion--and each of them is an ongoing, or a developing condition.

*C-53. Parental Involvement Program. This is an ongoing program designed to involve the community in gaining parental support and cooperation. It provides service of direct benefit to the community and allows parents to directly affect what happens to their children in the school setting.

C-54. Coordinated Curriculum.. The changes in philosophy of education on which the innovative programs incorporated into this project depend, necessitate a coordination that enables all elements to work together toward a common goal: a better overall learning program for children.

*C-55. Pupil Personnel Services. As the center organizational chart (Figure 7) shows, this department consists of a counselor, a nurse, and two visiting teachers. This staff sees their role as coordinating and serving students and personnel.

*C-57. Staff Acceptance of Change. The other conditions are those visible from the outside. In order to successfully implement the changes desired in this project, the staff must accept and work with the desired changes. While the other conditions are major efforts to which personnel are assigned, this is a condition seen by the management as one to be provided for the staff, rather than having a staff to provide it.

Events. Directly serving C-54, Curriculum Coordination, are a series of ongoing events, each related to the specific program or working center with which it is connected. This connection can best be seen as an ongoing revision of the basic program that formed the input, or starting point for that working center, and which results in a revised program adapted to the needs of the population served.

Reference is made to these "working centers" throughout this profile. Each program became the subject of a working center, within the Dunbar Learning Center. Thus E-01 is a working center in communication skills, and results in a revised communication skill package, P-13. Coupled with Output P-14, E-02 relates to a working center in multicultural social education, and so on. Therefore, there is a difference between the terms "working center" and "Learning Center" as used in this project and related through this profile. The Learning Center is the entire operation at the Dunbar School, while the working centers are the groupings of basic programs within the Learning Center.

The Outputs, P-13 through P-24, like the events that produce them and keep updating them, are ongoing, but in themselves constitute the output of development.

*E-01. Revision of Student Learning Program in Communication Skill (SWRL). This is an innovative program of the Southwest Regional Educational Laboratory being adapted for use in this project.

*E-02. Revision of Student Learning Program in Multicultural Social Education (SRDL). This is an innovative program being modified for the working center's needs.

E-03. Revision of Student Learning Program in use of Hilda Taba Strategies. Another specific innovation, although Taba strategies are used in this project far more widely than these specific revisions. This item was not specifically interviewed around, although much information on adaptation of Taba strategies was obtained elsewhere.

E-04. Revision of Student Learning Program in AAAS Science (NSF). This is a revision of the American Association for the Advancement of Science's program in science.

E-05. Revision of Student Learning Program in IPI Mathematics (RBS). This is a revision of the Individually Prescribed Instruction mathematics series. It was not interviewed around specifically, although the class was observed.

E-06. Revision of Student Learning Program in Suzuki Music. This is a revision of the Suzuki violin music program. Although not interviewed around specifically, some information was received by observing the class.

E-07. Revision of Student Learning Program in Orff-Kodally Music. Not specifically interviewed around, this is a revision of the Orff-Kodally program in music.

E-08. Revision of Student Learning Programs in Early Childhood Education (SEDL). Not specifically interviewed around, although some comparative information was gleaned in interviewing around E-09.

E-09. Revision of Student Learning Program in David Weikent Early Childhood Education. The project is developing strategies of its own for early childhood learning called "Gateways," but as yet this is not identified as a separate program. These strategies borrow in their concepts from David Weikert and others, so the interview around early childhood learning is included under this.

E-10. Revision of Student Learning Programs in Distar (Bereiter-Engleman). Not specifically interviewed around, this is a revision of the Distar Program.

E-11. Revision of Student Learning Programs in Visual Art. Not specifically interviewed around, although the class was observed.

E-12. Revision of Student Learning Programs in Physical Education. Not interviewed around, although the class was observed.

Products. Deriving from the processes that occupy this project, and continually being modified by these processes, are the various products that are replicated for the purpose of assisting in diffusion, first to satellite schools and later further afield. Note that P-13 through P-24 are titled "staff development packages" in their respective programs. The emphasis is on enabling staff to replicate the process developed during E-01 through E-12 at the Learning Center in adapting the programs to every setting to which they are applied.

P-13. Staff Development Package for Student Learning Program in Communication Skills. In P-13 through P-24, emphasis is on the process that the package will facilitate, even though the package as a product is intended to enable the program's replication.

*P-14. Staff Development Package for Student Learning Program in SEDL. This item was interviewed around in depth, and a student class was observed.

P-15 through P-24. Staff Development Packages to Facilitate Installation of the Programs covered in E-03 through E-12 respectively. None of these was specifically interviewed around.

The following products are listed as entities for the sake of grouping. Most of them constitute packages of products to fulfill the purpose named, and thus serve an implied "event" not specified by name (as in E-01 through E-12). These products have all been identified and are at least in progress. Some are at a stage of usable completion, but still subject to potential refinement as the project continues.

P-25. Pupil Personnel Packages in Individualized Instruction. See comments under P-34.

P-25. Pupil Personnel Packages in Tutoring. In this project, "tutoring" is a provision for older students to tutor younger students needing some assistance on a one-to-one basis. This process was observed, although not specifically interviewed around.

P-27. Pupil Personnel Packages in Parent Counseling. See comments under P-34.

P-28. Pupil Personnel Packages in Health Education. Not specifically interviewed around, although information concerning a specific example was obtained in the interview around C-55.

P-29. Pupil Personnel Packages in Taking Tests. See comments under P-34.

P-30. Pupil Personnel Packages in Interpreting Tests. See comments under P-34.

P-31. Pupil Personnel Packages in Self-development. See comments under P-34.

P-32. Pupil Personnel Packages in Careers. See comments under P-34.

P-33. Pupil Personnel Packages in Problem Solving. See comments under P-34.

P-34. Pupil Personnel Packages in Study Centers. Around P-24 through P-34, which constitute a very comprehensive set of packages to aid in implementing and replicating successful pupil personnel services, information of a general nature was obtained while interviewing for C-55.

P-35. School Paper. Now discontinued, this was a periodic newspaper prepared by the parental involvement group and distributed in the neighboring area of the Learning Center.

P-36. Parents' Participation Handbook for Staff. A handbook designed to help parents know how to participate in the Learning Center.

P-37. Early Childhood Handbook for Parents. A handbook designed to aid parents in fulfilling early childhood educational needs with their children at home.

P-38. Parental Involvement Brochure. A brochure setting forth proven methods of securing parental involvement. This brochure is designed for use by school systems.

P-35 through P-38 were not specifically interviewed around. However, information about them was gained in the interviewing around C-53.

P-39. Final Project Report. The completed project will be documented and presented to the appropriate official in the sponsor's agency.

P-40. Project Progress Reports. These are reports to the school district and the funding agency about the details of programs within the project.

*P-41. Quarterly Budget Summaries. A projection of necessary expenditure for the ensuing quarter, to accomplish project plans during that period.

P-42. Monthly Budget. A projection over shorter time base, and less formal than P-41, to facilitate operation.

Items P-43 through P-50 represent generic sets of evaluations, each of which is used across the relevant events and products to which it refers. To attempt to describe each, beyond this simple relationship, would have entailed more time on the project than our interviewers had available. P-43 was interviewed around, as exemplary of the whole set of generic products.

*P-43. Process Evaluation Reports for Revised Student Learning Program. An across-the-board report collected from all the programs in process.

P-44. Process Evaluation Reports for Staff Development Packages.

P-45. Process Evaluation Report for Pupil Personnel Packages.

P-46. Process Evaluation Report for Parental Involvement Packages.

P-47. Product Evaluation Report for Revised Student Learning Program.

P-48. Product Evaluation Report for Staff Development Packages.

P-49. Product Evaluation Report for Student Personnel Packages.

P-50. Product Evaluation Report for Parental Involvement Packages.

P-51. Evaluation Designs for Products for Student Learning Program. Particularly for the results of revisions represented in E-01 through E-12.

P-52. Curriculum Development Process Handbooks. These handbooks were designed for spelling out the curriculum developments intended to meet identified needs.

*P-56. Product Evaluation Reports. A generic form of evaluation used as a basis for reports on P-47 through P-50.

Output map. The outputs of the Dunbar Project described above are presented graphically in Figure 8 showing the dependent relationships between them.

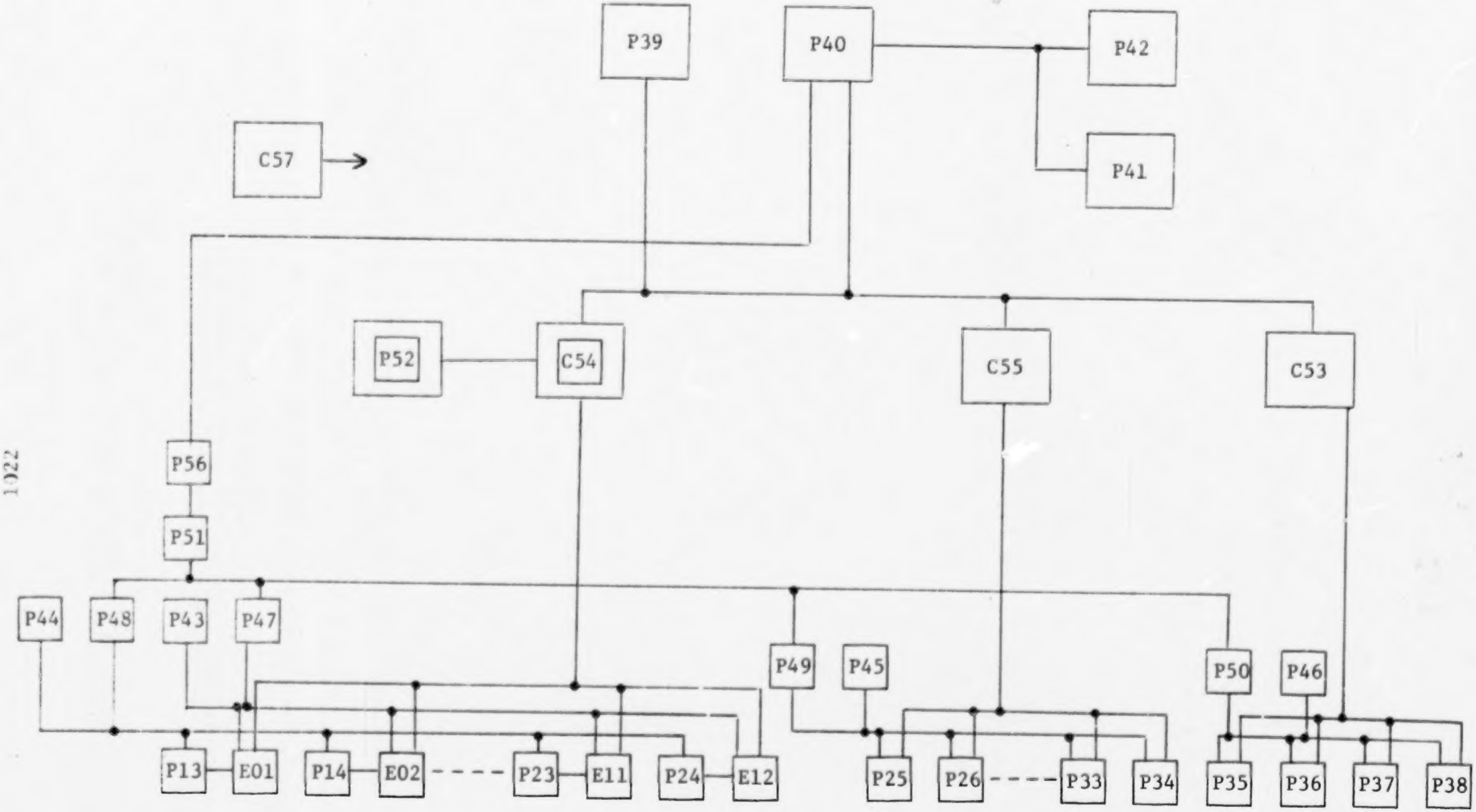

P39
P40
P42
P41
C57
P52
C54
C55
C53
P56
P51
P44
P48
P43
P47
P49
P45
P50
P46
P13
E01
P14
E02
P23
E11
P24
E12
P25
P26
P33
P34
P35
P36
P37
P38

FIG. 8. Output map.

Chapter III: Summary of the Data

Interview data were gathered around the selected outputs described in Chapter II. The interviews sought to elicit for each output to be analyzed (a) the standards by which one judges the satisfactory completion of the output, (b) the tasks required to generate an output meeting those standards, and (c) the enablers (knowledges, skills, and sensitivities) which facilitate the carrying out of those tasks. The tables included in this chapter summarize the interview data by these categories (standard, task, knowledge, skill, or sensitivity) and by the outputs interviewed around.

Within each of the categories are a series or set of descriptive labels which are representative of interviewee statements (raw data) within a particular category. These descriptive labels are listed in the table under the category heading. In the process of reducing raw data (interviewee statements) about an output, these narrative statements made by the interviewee were linked to one of the categories of standards, tasks, or enablers. Each narrative statement was then classified by means of a number code according to the most representative descriptive label within a given category.

During data collection open-ended questions about each of the categories were asked of the interviewee with respect to a particular output of the project for which he carried major responsibility. In most cases each output was interviewed around with only one project staff member. However, when time permitted, a major output was investigated through interviews with more than one staff member. Care was taken to select, whenever possible, an informant for each output who had both consistent and major involvement with the output's production.

However, on this project the actual number of individual outputs that personnel produced reaches a very considerable size. They are frequently completing or preparing instruments, for example, or assessing and interpreting the results of those measurements. The important things on this project are not how all these many small things are done so much as how all this work fits together so that the desirable ends result. For this reason the products, events, and conditions interviewed around are those at much more comprehensive levels. In the course of such interviewing, mention is inevitably made of many of the more detailed outputs, but not at the detail level--their use is taken "as read."

Each of the tables to follow in this chapter provides the frequency with which these interviewees cited specific category statements around the outputs identified. These specific statements are represented by the descriptive labels in the tables, which by means of the table are linked within a category to a specific output. Descriptive statements for standards are found in Tables 1 and 2, those for tasks in Table 3, knowledges in Table 4, skills in Table 5, and sensitivities in Table 6.[1]

---

[1] If the reader is interested in the narrative statements of the interviewees (raw data), these can be found in the Appendix. To locate (footnote continued on next page)

A diffusion effort of the kind and magnitude required of this project, in concentrating on the human factors felt by the staff to be vital to their efforts, found the interview team looking at the central foci of efforts or processes by which the desired ends of the project were being achieved and by which the various people involved were being brought together to produce those ends.

The three central features of the ongoing project are Parental Involvement (C-53), Curriculum Coordination (C-54), and Pupil Personnel Services (C-55). In questioning about these conditions, information falls out about many products and events either serving to achieve them or to replicate them. This may be, for example, only at the level of a task description that says "design an evaluation form," thus revealing that such an evaluation form is a product of the overall effort.

The main questioning, therefore, was directed at what brought about C-53, C-54, and C-55. Some of this questioning was at a more specific level, however, such as that applied to a curriculum subject or to the early childhood level. The tables in this chapter summarize the interview data and enable it to be critically examined.

Table 1 lists categories of standards indentified as production oriented. Note that C-53, Parental Involvement, lists only one standard in this table, "Functions as planned."

C-54 and C-55 on the other hand, have more production-oriented standards mentioned. The group of standards listings under C-54 in Appendix A indicate some objectivity in measures used in developing a coordinated curriculum. The group of listings under C-55 in Appendix A indicates the standards recognized for pupil-personnel services. Note particularly the four different evidences of utility of value listed with the J-LM identifier 1 05:

> "provides for needs, rather than solving problems,"
> "relieves anxiety by parent specific behavior to turn to, in order to help work on his problem,"
> "it teaches an approach to raising children, to relating to children, that can be measured by control,"
> "achieving greater exactness in choice of multidiscipline approaches."

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the narrative statement for any given category, standard, task, or enabler, first note the output and its identification number in the table. Second, note that each descriptive label within a given category has a distinct number or code. Turn to the Appendix and locate the output. Under the output locate the category label or heading (standard, task, or enabler) and pinpoint the number or numbers (depending on frequency cited) of the descriptive label which appeared in the table. The statement opposite this number in the Appendix is the original narrative statement from an interviewee and is only represented in the table by the descriptive label and its number coding.

TABLE 1

Output Standards Cited for Each Output Analyzed

Outputs	Production Standards (set J-1)																Totals
	01 Completeness of content	04 Communication and clarity	05 Utility or value	06 Acceptancy by users	08 Concurrence with others	11 Appropriateness of design	12 Goal attainment	13 Acceptancy by others	14 Acceptancy by sponsor	15 Compliance with guidelines	16 Favorable comparison with other products	19 Criteria logically related	21 Sources of variance have been controlled	22 Functioned as planned	25 People aware of products	26 Components complement each other	
E-01 Revisions of Student Learning Program in Communication Skills							4										4
E-02 Revisions of Student Learning Program in Multicultural Social Education	1			1			2										4
E-07 Revisions of Student Learning Program in Music					1												1
E-09 Revisions of Student Learning Program for Early Childhood	2						1										3
P-41 Quarterly Budget									1	1							2
P-43 Process Evaluation Report for Revised Student Learning Program	1		1			1	1						1				5
C-53 Parental Involvement														1			1
C-54 Curriculum Coordination		1					1				1	1				1	5
C-55 Pupil Personnel Services			4				2	1						1	1		9
P-56 Product Evaluations					1		2	1									4
Totals	4	1	5	1	2	1	13	2	1	1	1	1	1	2	1	1	38

Table 2 picks up a different class of standards, those identified as being of a management type. Again, noting particularly the entries for C-53, C-54, and C-55, "Parental Involvement" picks up in this table, while the others have fewer entries. Note the variety of evidence expressed against the J-LM identifiers 2 17 for C-53 in Appendix A:

> "more than 500 parents a month go through the homemaking program,"
> "25% of enrollees in black studies courses are white,"
> "support (attendance) from wide geographical area on many programs,"
> "they have surpassed expectations in more programs than they would have planned--effort of self-motivation."

For C-54 and C-55 there are only one and two management standards listed respectively. These seemingly reflect reactions that are evidence of success.

Table 3 lists the frequency with which categories of tasks were mentioned in connection with various products, events, and conditions. This is a more "dense" table than the others. Some 18 different major categories of tasks are listed, with total frequency counts varying from 1 to 49. Note that the highest number (49 times) refers to "producing the product."

Table 4 lists knowledges mentioned as being necessary for various tasks connected with products, events, and conditions. One knowledge apiece is entered against three of the conditions questioned around. The knowledges center primarily around products, with some mentioned around events.

Table 5 and 6 list, respectively, skills and sensitivities mentioned in connection with various products, events, and conditions. Note that staff acceptance of change (C-57) lists four sensitivities as enablers, each appearing in Appendix A as sensitivity to:

> "the black problem in a southern city,"
> "white prejudice in black capacity,"
> "children's need for firm but gentle discipline,"
> "teachers' need for definitions and limitations of responsibility."

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TABLE 2

Process Standards Cited for Each Output Analyzed

Outputs	Management Standards (set J-2)										Totals
	04 Meeting of deadlines	07 Recurrence of activity	12 No gaps in representation of sk.	14 Feeling no deficiencies	15 Tasks perceived & action taken	17 Public reflect interest in outcome	24 Cost/benefit relationships acceptable	33 Adequate growth evidenced	34 Effort shows favorable reaction	39 Evidence of preplanning	
E-01 Revisions of Student Learning Program in Communication Skills		1			1		1				3
E-02 Revisions of Student Learning Program in Multicultural Social Education									2		2
E-07 Revisions of Student Learning Program in Music									2		2
P-14 Staff Development Package in Social Studies Program			1		1			1			3
P-41 Quarterly Budget	1						1				2
P-43 Process Evaluation Report for Revised Student Learning Program										1	1
C-53 Parental Involvement		1				4					5
C-54 Curriculum Coordination						1					1
C-55 Pupil Personnel Services									2		2
C-57 Staff Acceptance of Change				1			1		2		4
Totals	1	2	1	1	2	5	3	1	8	1	25

TABLE 3

Tasks Cited for Each Output Analyzed

Outputs	Production Tasks (set NO) 01 Identifying/clarifying prob.	02 Formulating objectives	03 Designing the product	04 Producing the product	05 Collecting - processing data	06 Assessing quality of product	07 Diffusing product	21 Procuring professional staff	22 Operationalize accountability structure	23 Procuring field settings, etc.	24 Establish quality control mech.	25 Maintaining job satisfaction	26 Facilitating growth of staff	29 Promote facilitating field setting/environment	30 Maintain info. flow	31 Diffuse info. within project	32 Disseminate info. beyond project	33 Establish decision-making mechanisms	Totals
E-01 Revisions of Student Learning Program in Communication Skills		1	4	11	4	1	1				1			2					25
E-02 Revisions of Student Learning Program in Multi-cultural Social Education					14	4	1			2				5		1	1		28
E-07 Revisions of Student Learning Program in Music		1	3	3	3		2		1		1			1		1			16
E-09 Revisions of Student Learning Program in Early Childhood	1	5	1	8	1														16
P-14 Staff Development Package in Social Studies Program			4	8	1	2	2	10			2			4		1			34
P-41 Quarterly Budget				2		1			7		1								11
P-43 Process Evaluation Report for Revised Student Learning Program						2					1								3
C-53 Parental Involvement	4	1		9			1			2		3	1	17		2		1	41
C-54 Curriculum Coordination				1			1	5	2		5	3	2	2	1	3		1	26
C-55 Pupil Personnel Services	2	1	5	7	12	2	1			1	1		1	5		3			41
P-56 Product Evaluations	1	3	5		4	2			4							1			20
C-57 Staff Acceptance of Change									2		1	1	1	1				3	9
Totals	8	12	22	49	39	14	9	15	16	5	13	7	5	37	1	12	1	5	270

TABLE 4

Enabling Knowledges Cited for Each Output Analyzed

Outputs	Knowledges Categories (set S-1)									Totals
	01 Standard school subjects	02 Education course subjects	03 RDD&E subjects	04 Technical subjects	05 External project context (focal)	06 External project context (situational)	12 Resources: personnel	21 Management techniques	22 Operational details: eqmt.	
E-01 Revisions of Student Learning Program in Communication Skills		1								1
E-02 Revisions of Student Learning Program in Multi-cultural Social Education					1					1
E-07 Revisions of Student Learning Program in Music	2									2
P-14 Staff Development Package in Social Studies Program					1					1
P-41 Quarterly Budget						1		1		2
P-43 Process Evaluation Reports for Revised Student Learning Program			1							1
C-54 Curriculum Coordination	1									1
C-55 Pupil Personnel Services				1						1
P-56 Product Evaluations		2	4	1		1	1		1	10
C-57 Staff Acceptance of Change						1				1
Totals	3	3	5	2	2	3	1	1	1	21

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TABLE 5

Enabling Skills Cited for Each Output Analyzed

	Skills Categories (set S-2)																
Outputs	Teaching 01	Mediation of people interact 02	Mediating of subject material 03	Programming of subject presen. 06	Analytical skills in data handling 10	Using media 16	Plan/visual/concept/organz 19	Explicating of objectives 24	Administering data-gathering instr. 25	Getting others' work acceptl. 29	Adaptation to situation 30	Assessing skills/growth 37	Maintaining good physical condition 41	Eliciting responses from others 42	Instilling confidence in others 43	Fiscal accounting 44	Totals
E-01 Revisions of Student Learning Program in Communication Skills	1																1
E-02 Revisions of Student Learning Program in Multi-cultural Social Education	1																1
E-07 Revisions of Student Learning Program in Music	1	1				2					1		1				6
E-09 Revisions of Student Learning Program in Early Childhood			1	1													2
P-14 Staff Development Package in Social Studies Program	1									1		1		1			4
P-41 Quarterly Budget																1	1
P-43 Process Evaluation Reports for Revised Student Learning Program					1												1
C-53 Parental Involvement		1															1
C-54 Curriculum Coordination		1					1			1				1	1		5
C-55 Pupil Personnel Services									1								1
P-56 Product Evaluations								1	1								2
Totals	4	3	1	1	1	2	1	1	2	2	1	1	1	2	1	1	25

TABLE 6

Enabling Sensitivities Cited for Each Output Analyzed

	Sensitivities Categories (set S-3)																	
Outputs	01 Values of self and others	02 Capabilities/constraints self/others	03 Needs of self and others	04 Context of subject matter	13 Language barriers	16 Interacting value systems	17 Personality charac. of others	19 Supportiveness required	21 Limitations of analyses of data	22 Target responses	25 Individual differences	28 Admitting mistakes	30 Target frame of reference	34 Accept policy/guidance	36 Feeling of personal security	45 Auditory discrimination	46 Sense of humor	Totals
E-02 Revisions of Student Learning Program in Communication Skills		2		1		4				1	1							9
E-07 Revisions of Student Learning Program in Music			3	1			1			1				1		2	1	10
P-14 Staff Development Package in Social Studies Program													1					1
P-41 Quarterly Budget	1					1												2
C-53 Parental Involvement	1				1													2
C-54 Curriculum Coordination	1			1				1										3
C-55 Pupil Personnel Services				1								1			2			4
P-56 Product Evaluations							1		1									2
C-57 Staff Acceptance of Change			2			2												4
Totals	3	2	5	4	1	7	2	1	1	2	1	1	1	1	2	2	1	37

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Chapter IV: Supplementary Data

This chapter contains information about the backgrounds of project staff, the resources indicated by them as available for carrying out project tasks, and the classification of outputs.

Summary of Staff Background

Of the 36 professional staff members directly assigned to the project at the time of the visit, one has a doctorate, 25 have master's degrees, and 10 have bachelor's degrees. The members of the clerical support staff have no academic degrees, and all work at the Learning Center.

Of the 13 people formally interviewed in connection with this project, 10 were located at the center and three at the district office. Of these, nine completed questionnaires, in addition to the formal interview, and from their responses the following information is drawn. Questionnaires were received from two people at the district office and seven at the Learning Center.

In answer to the question about what in their professional training was most relevant to their tasks, some responded with a list of courses, while others questioned whether any of their formal training was relevant (although maybe not in those words). There were some answers such as either a workshop, a personal training session, a specific work experience, or combinations of such that pinpointed a specific time frame that gave these individuals their own "spark" allowing them to contribute in their own unique ways to this project.

Of the nine who responded, eight[2] had an aggregate of 39 years working in public schools. Most of them had prior experience working on R & D projects and several of them had been principal investigators for projects.

One thinks of such a project as functioning in its own context and that possibly the Project Director, and maybe one or two of his assistants, may get out to "spread the gospel" about what the project is doing. A surprising part of the response in these questionnaires is that most of these people get out to make presentations about their work.

The specialty of highest degree centered in educational administration, with some in teaching, educational research, guidance/counseling, statistics and measurement, business administration, and some subject-matter specialties, such as music, mathematics, child development, and curriculum supervision.

In answer to questions about specific knowledges and skills that the position requires, various specialties were again named, with emphasis on statistics, accounting, measurement theory and test construction, and philosophy of learning and educational psychology. However, one skill recurred in the responses, though individuals used different words to describe it: "strong leadership of the democratic variety."

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[2] The ninth did not respond in this category.

Support Resources

Services. Checked on the questionnaires by various personnel as services provided and necessary to the carrying out of their jobs were:

Equipment, construction (mechanical, electronic, carpentry, etc.).
Printing.
Photography.
Art work and illustrations.
Technical writing.
Editing.
Secretarial service, other than typing.
Typing.
Purchase of supplies and equipment.
Library holdings.
Subscriptions to technical and professional journals/periodicals.
Requests for documents or publications not locally available.
Computer analysis services. (data processing)
Computer program writing.
Statistical consultation.
Audio-visual aids and devices.
Subjects for experimentation or try-out of procedures.
Travel arrangements.
Budgetary and other fiscal financing.
Scoring of test items.
Television facilities and equipment.

Support Equipment. Checked by various personnel as immediately available and used by them in the project were:

Dictating equipment.
Desk calculators.
Remote computer terminal.
Onsite computer.
Key-punch machine.
Data card sorter.
Photographic equipment.
Video tape.
Television camera.
Readers for microfiche or microfilm.

Classifications of Output Characteristics

Outputs may be categorized in terms of a number of variables. Among them are (a) Structure (product, event, or condition), (b) Function (policy setting, management, or production), (c) Level (focal, component, or facilitating), (d) Character (knowledge, technology, implementation, or information), and (e) Stage of completion. These five schema are represented in Table 7 for each project output identified, with frequencies summarized for each category.

TABLE 7

Classifications of Output Characteristics

Project Outputs		Output Characteristic*																		
		Structure			Function			Level			Character (Products only)				Completion Stage					
No.	Label	p	e	c	ps	m	p	f_1	c	f_2	h	t	i_1	i_2	1	2	3	4	5	6
E-01	Student Learning Program in Communications Skill (SWRL)		X				X			X								X		
E-02	Student Learning Program in Multi-Cultural Social Education (SEDL)		X				X			X								X		
E-03	Student Learning Program in Hilda Taba Strategies		X				X			X								X		
E-04	Student Learning Program in AAAS Science (NSF)		X				X			X								X		
E-05	Student Learning Program in IPI Mathematics (RBS)		X				X			X								X		
E-06	Student Learning Program in Suzuki Music		X				X			X								X		
E-07	Student Learning Program in ORFF-KOPALY Music		X				X			X								X		
E-08	Student Learning Program in Early Childhood Education (SEDL)		X				X			X								X		
E-09	Student Learning Program in David Weikert Early Childhood Education		X				X			X								X		
E-10	Student Learning Program in DISTAR (Bereiter-Engleman)		X				X			X								X		
E-11	Student Learning Program in Visual Art		X				X			X								X		
E-12	Student Learning Program in Physical Education		X				X			X								X		
P-13	Staff Development Package for Student Learning Program in Communication Skills	X					X		X			X						X		
P-14	Staff Development Package for Student Learning Program in SEDL	X					X		X			X						X		
P-15	Staff Development Package for Student Learning Program in TABA Strategies	X					X		X			X						X		
P-16	Staff Development Package for Student Learning Program in NSF Program	X					X		X			X						X		
P-17	Staff Development Package for Student Learning Program in IPI Mathematics	X					X		X			X						X		
P-18	Staff Development Package for Student Learning Program in Suzuki Music	X					X		X			X						X		
P-19	Staff Development Package for Student Learning Program in ORFF-KOPALY Music	X					X		X			X						X		
P-20	Staff Development Package for Student Learning Program in ECE (SEDL)	X					X		X			X						X		
P-21	Staff Development Package for Student Learning Program in David Weikert (ECE)	X					X		X			X						X		
P-22	Staff Development Package for Student Learning Program in DISTAR	X					X		X			X						X		
P-23	Staff Development Package for Student Learning Program in Visual Art	X					X		X			X						X		
P-24	Staff Development Package for Student Learning Program in Physical Education	X					X		X			X						X		
P-25	Pupil Personnel Packages in Individualized Instruction	X					X		X			X						X		
P-26	Pupil Personnel Packages in Tutoring	X					X		X			X						X		
P-27	Pupil Personnel Packages in Parent Counseling	X					X		X			X						X		
P-28	Pupil Personnel Packages in Health Education	X					X		X			X						X		
P-29	Pupil Personnel Packages in Taking Tests	X					X		X			X						X		
P-30	Pupil Personnel Packages in Interpreting Tests	X					X		X			X						X		
P-31	Pupil Personnel Packages in Self-Development	X					X		X			X						X		
P-32	Pupil Personnel Packages in Careers	X					X		X			X						X		
P-33	Pupil Personnel Packages in Problem Solving	X					X		X			X						X		
P-34	Pupil Personnel Packages in Study Centers	X					X		X			X						X		

TABLE 7 CONCLUDED

Classifications of Output Characteristics

Project Outputs		Output Characteristic[a]																		
		Structure			Function			Level			Character (Products only)				Completion Stage					
No.	Label	p	e	c	ps	m	p	f_1	c	f_2	k	t	i_1	i_2	1	2	3	4	5	6
P-35	School Paper	X				X				X			X			X				
P-36	Parents Participation Handbook for Staff	X					X		X			X				X				
P-37	Early Childhood Handbook for Parents	X					X		X			X					X			
P-38	Parental Involvement Brochure	X					X		X				X				X			
P-39	Final Project Report	X				X		X					X						X	
P-40	Project Progress Reports	X				X		X						X						X
P-41	Quarterly Budget Summaries	X				X				X				X						X
P-42	Monthly Budget	X				X				X			X							X
P-43	Process Evaluation Reports for (revised) Student Learning Program	X				X				X				X						X
P-44	Process Evaluation Reports for (revised) Staff Development Packages	X				X				X				X						X
P-45	Process Evaluation Reports for (revised) Pupil Personnel Packages	X				X				X				X						X
P-46	Process Evaluation Reports for (revised) Parental Involvement Packages	X				X				X				X						X
P-47	Product Evaluation Reports for (revised) Student Learning Program	X				X				X				X						X
P-48	Product Evaluation Reports for (revised) Staff Development Packages	X				X				X				X						X
P-49	Product Evaluation Reports for (revised) Pupil Personnel Packages	X				X				X				X						X
P-50	Product Evaluation Reports for (revised) Parental Involvement Packages	X				X				X				X						X
P-51	Evaluation Designs for Products	X				X				X		X				X				
P-52	Curriculum Development Process Handbook	X			X				X			X						X		
C-53	Parental Involvement Program			X			X	X												
C-54	Coordinated Curriculum			X			X	X												X
C-55	Pupil Personnel Services			X			X	X												X
P-56	Product Evaluations Reports	X				X				X				X						X
C-57	Staff Acceptance of Change			X		X				X								X		
Classification Frequencies[b]		41	12	4	1	16	40	5	26	26	0	26	4	11	0	3	2	36	1	15

[a] The specific output characteristics are identified as follows:

Structure	Function	Level	Character	Completion Stage
p - product	ps - policy setting	f_1 - focal	k - knowledge	1 - completed over one year ago
e - event	m - management	c - component	t - technology	2 - completed 3 to 12 months ago
c - condition	p - production	f_2 - facilitating	i_1 - implementation	3 - completed within last 3 mos.
			i_2 - information	4 - currently in progress
				5 - not yet underway
				6 - on going (continuous)

[b] Data totals in this table may vary slightly from data in tables reported elsewhere. This is a function of decision rules governing classification of outputs having been revised and applied to these data subsequent to the preparation of the profile.

Chapter V: Dynamics of the Project

Focus of the Project

A reaction of many visitors to the Dunbar Learning Center is a feeling that "successful" learning is occurring. Documentation indicating such success is found in the results of the many measures conducted and the analyses run, but these are not the only evidence demonstrating the success of the project.

Everyone associated with the project demonstrates a commitment to its success and to cost-effectiveness. The data are analyzed to determine which of a variety of available programs most cost-effectively produces certain learning outcomes. The data are also used to measure the merit of changes, attempts at improvement, and where weak spots have been observed in specific programs. All of this activity may be unprecedented in such a setting, but the results apparently justify the cost in the eyes of the district. They feel the variety of programs being installed and diffused throughout the district are achieving their intended goals.

There is more to identifying this acceptance than the collecting and analyzing of empirical data and then applying their interpretations to optimize the results of the activities occurring in the Learning Center. These data can reflect the learning that occurs, but much of what occurs happens because of human relationships that promote the desired results in nonverbal ways. These kinds of nonverbal behaviors are not subject in this setting to being empirically analyzed.

At the district office a main concern is with measurable results, mainly because that is where such results are accumulated and attended to. At the Dunbar Center, the concern is also with measurable results in terms of cost-effectiveness, but a further concern is with how those results are achieved. Because the human interactions occur at the Learning Center, the staff are primarily concerned with doing the "right things" to bring about the desired results.

How the System Works

Each of the various subject area programs handled by the overall program is implemented or worked on by a working center within the Dunbar Center. Such a working center consists of an assigned group of staff, including a center teacher, a curriculum writer, and sometimes a paraprofessional aide. These two or three staff members work with a group of about six children at a time, using the materials they are developing within that subject area program. Children from regular classes are selected in succession for periods of activity in the working centers.

The objective of this working center group is to develop materials that will enable the procedure and its accompanying learning process to be transferred, first to the regular classroom teachers in the Dunbar School, and later to their counterparts in satellite schools. To aid in this, site coordinators provide the necessary linkage that enables feedback to occur in filling in details that may be missing from the packaged materials as used at Dunbar.

Earlier in the project's life the roles of center teacher and curriculum writer were separately specified, but in the present operation the staff in each center are encouraged to exchange roles so that each gets the "feel" of the whole activity.

The curriculum consists of a form of lesson outline specifying strategies for conveying subject content rather than the actual subject content to be conveyed. This design is intended to bring about the desired learning outcome or objective. Working with the outline in its current form, the person momentarily acting as "teacher" works with the children in the working center group, while the other person acts as an observer, and uses a checklist type of data-collecting instrument to detail the fulfillment of prescribed strategies and the actual responses of students while the lesson is being conducted.

The staff development person assigned to a specific working center works with both the center staff already referred to and with regular teachers. In conjunction with the site coordinator, staff development personnel also work in conjunction with teachers at satellite schools who are participating in specific programs being diffused to those schools. (Not all of the satellite schools take all the working center programs being worked on in the Dunbar Center.) The objective of these efforts is to develop staff development packages associated with each program that will adequately prepare the staff to engage in the activity of the program.

While the setting in which the central activity around which interviews were conducted was a learning center for a black community, the district is fortunate in having a variety of populations within its jurisdiction. Thus the satellite schools, which the interviewer time commitment unfortunately did not allow to be covered, are located where they serve other groups, such that further adaption is needed, using the same techniques developed at this center, but for a different target population.

In this project, a different approach to integration has been adopted. As well as being less costly than bussing numbers of students to more distant schools, it appears to have advantages to the student population served. This is to "integrate"--that word was not used--the faculty. White personnel have been introduced into a school where the faculty had formerly been all black. Most of the individual working center teams consist of some black and some white individuals, who work together and periodically exchange roles, as described elsewhere. Thus the children observe, in a nonhostile environment, persons of both races working together.

Most of the programs used in the working centers for adaptation to the school's population needs originated elsewhere; for example, from educational laboratories or commercial publishers. In some instances, a department consisting of several centers working on different programs in the same subject area will work on putting together the better features of such programs into a single unit developed in the Dunbar Center, and then work to optimize that material.

Staff preparation is extremely important because the emphasis is on strategy that is quite teacher dependent. The Hilda Taba strategies are used extensively and have been an influence on other methods used. The teacher, in this strategy, does very little "telling" or instructing in the conventional sense. Student thought in the desired direction is initiated by questioning. For example, in a social studies class an initial question might be, "If you were .....and lived in .....then what do you think you might be doing?" Such an initial question is open ended, in that no specific set of answers is expected. Students new to such strategies may need further questions to encourage them to answer, but those students observed by the interview team while onsite needed little such encouragement--they were eager to answer.

The teacher works to obtain participation of all students, and this is found to be simpler to achieve with open-ended questions. It avoids the need for students to repeat answers they have already heard from other students, or to find a different way of saying substantially the same thing, although this is accepted.

Answers felt to be inappropriate are not simply rejected, but pursued by further questioning as a means of leading to what is felt to be more acceptable answers. For example, if a student suggests that an inhabitant of a hot desert area lives in an igloo, questions leading to a reason why this is inappropriate are used. (That rather extreme example was not heard at any of the centers.)

At the early childhood (preschool) level, the David Weikert strategies are highly favored because of their results. These strategies distinguish four levels of representation for concepts and four goal areas within which concepts to be learned may be categorized.

The four levels of representation are:

1. Object Level. This is the lowest, in which only real objects are identified, directly and visually.

2. Index Level. At this level, senses other than sight may be used. For example, the smell of an orange may be identified by the name of the fruit. Also, sight may be used in an indirect way. For example, spoors may be used as evidence that the animal they identify passed that way.

3. Symbol Level. At this level, either two-dimensional pictures that convey the impression of the person or object may be used as representation, or the level may also include students role playing the persons or objects named.

4. Sign Level. Here the student recognized the printed word that represents the object or person.

The value of identifying these levels is in the idea that the individual student's perception can be categorized so his next step in learning can be presented to him at an appropriate level. Representation at a level in which he is still doubtful could be reinforced, then, by representation at a level in which he has confidence until the transition is satisfactorily made to the next higher level.

Goal areas categorize families of concepts dealing with (a) temporal relationships ("juice time," etc.), (b) spacial relationships (specific position), (c) seriation relationships (ordering), and (d) classification relationships. Curriculum writers outline lesson plans, then, with a description of the goal area. For each representation level suggested materials and activities are offered, while for one level a complete outline of activity at that level is presented. Such a plan is seen as sufficient in allowing the teacher to adapt the plan to representation levels appropriate to students' needs. An important factor in teacher preparation (staff development) is that the teacher make the presentation naturally, not in a rote, ritualistic manner.

Atmosphere of the Project

One component in the reason for the project's local acceptance is the part played by parental involvement. The majority of parents believe that this school is doing something worthwhile in comparison to the "old" school, and many of the parents are participating, either in their children's education, or in getting an education for themselves. This involvement of parents initially began with the organized presentations by members of the lay advisory committee, who are drawn from the community. There was also personal contact with every family, which entailed door-to-door work. The administrator of the parental involvement program emphasized quite strongly the need for reaching ALL the people of the community. Another important factor was determining and serving the needs and interests of people in the community, so that the school could become a community learning center in a true sense--not merely a place for "schooling kids."

The personality of the Principal, who is also the onsite Project Director, is a factor to be considered in this project. He seems to possess a unique combination of being both a highly competent administrator and a sensitive human being. With a combination of firmness and sensitivity, he is seen as providing guidance and encouragement to staff, students, and community people, for generating their own individual self-confidence and decision-making ability.

One aspect of the activities at the Learning Center previously mentioned within this profile is their attempt to establish need fulfulling relationships between the people involved. One example of this is in the operation of the pupil personnel services.

The whole department has acquired a different relationship to the student population from that usually associated with such a department. They have become known as "the school helpers," with the result that pupils come to members of this department whenever they feel they need help, without waiting to be "found" and referred. There is a sense of confidence about the whole operation.

The tutorial program is under the supervision of this department, particularly the visiting teachers, where older children are assigned to tutor younger children on the basis of ability in the needed subject area and compatibility between the children (which has proved to be little trouble: tutors appear to take a very personal interest in their charges, which promotes a healthy relationship). This helps in working toward the elimination of special education as a separate activity catering to "slow learners," since they are drawn into the mainstream where they are no longer "slow."

Another example of this need fulfilling aspect being worked for in the project is in the music programs. Each of these subjects is handled as an integrated and individual means of expression. The teachers work toward techniques for achieving this and developing the "natural" talent of the children. To watch a 3- or 4-year-old stand with pride before an audience, and perform on the violin with a precision that justifies that pride, the observer can see why that youngster has a start that gives him (or her) confidence in tackling other activities as the time comes. Introduction of students to music, often involving their parents as well, is designed to provide success which subsequently will be reflected in their confidence and improved performance in other subject areas.

Chapter VI: Training Implications

Usually this chapter would carry suggestions about the training a person would need in working on the project that the profile is describing. In this instance, "implications" can have a somewhat different connotation, for this project is where to get trained for this kind of work. It is true that the project is not a training program, *per se*. But training is definitely an integral part of it.

The personnel hired as center teachers, curriculum writers, and site coordinators, have backgrounds that equip them for the teaching level or curriculum content involved, and probably with teaching in schools that serve the same kind of population. They are also involved intimately with staff development, which is training.

Thus, in this context, training to work in such a project is not a separate, preparatory function. The project is concerned with diffusing learning programs adapted to the needs of the specific school setting into which they are adopted. And part of this diffusing-adoption process is concerned with being sure that the people who use these materials to produce these learning outcomes are properly equipped to do so.

During the visit, several expressions were made about the value of exchanging roles within the centers, so that each member of the team spends time teaching from the outline, making observation of the other member(s) teaching, trying out writing skills in making appropriate modifications, and so forth. This procedure would seem to apply the "two heads are better than one" principle for the benefit of the work turned out, which is reason enough in the project's eyes for using it.

However, as a training implication, it provides broader experience within the same time span and thus gives these people far better preparation for future work of this type, either working in teams or as single individuals. The formal observing for the purpose of gathering data serves a quite precise purpose on this project, a purpose that may be applied at other times on other projects. But it will have an influence on the activitiy of the person, should she work in the future as a classroom teacher, because she will be sensitized to using this kind of observation.

So one implication to be drawn from this project is that some aspects of the way it operates could provide mechanisms for training. Possibly the kind of measures or instruments used here could be adapted for use in a student teaching situation to provide a discipline facilitating the student teacher's observing the experienced teacher in action, and then, when roles are exchanged, to provide the experienced teacher with a mechanism for recording observations on the student teacher's performance.

On this project, the main function of this procedure was not to monitor teacher performance, but to measure the adequacy of the materials for teacher use in producing learning outcomes. Another possible implication of this activity for training purposes is that use in the way described

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above could better prepare teachers and student teachers to adapt existing materials for use with the student population found in their own classroom.

This could be a piece of training virtually putting the benefit of RDD&E right within the instant of teaching in a classroom situation. This kind of training could possibily sensitize teachers so that they are able to observe deficiences on the spot and correct them for the benefit of the students there present. Such action may not qualify for the current definition of RDD&E because it forms part of a day's teaching activity, but it might be an application of RDD&E methodology that could be considerably valuable.

In writing this, it is recognized that this response to the question implicit in the chapter title differs from the intended target of that question. However, it is believed that in light of the Dunbar Project the observation thus presented could prove even more useful in its impact on education than responses of the form implicitly expected.

Appendix

Appendix: Listing of Output Standards, Tasks, and Enablers

The following is a list of standards, tasks, and enablers for outputs around which interviews were conducted. These statements were extracted from discussions with interviewees and were coded into their respective category sets. The selected code precedes the statement and indicates the following for:

STANDARDS

Code J: Structure of Standards.

J-1 Standards against which outputs are judged. (output oriented)

J-2 Standards against which processes and/or operations are judged. (process oriented)

Code LM: Primary Categories of Standards.

TASKS

Code NO: Clusters of Tasks.

ENABLERS

Code S: Structure of Enablers

S-1 Knowledge.

S-2 Skill or ability to perform.

S-3 Sensitivity or awareness.

Code UV: Primary Categories of Enablers (knowledges, skills, or sensitivities).

The codes associated with these three categories (standards, tasks, enablers) are the same both here in the listing and as previously cited in Chapter III tables.

E-01: Revision of Student Learning Program in Communication Skill (SWRL)

STANDARDS

J	LM	
1	12	Enable children to read, understand, unlock words more efficiently.

2	07	Teachers raised questions at district-wide staff development meetings about things they need.
1	12	It is learning as well as fun.
1	12	Results of tests were good.
2	15	Fifth grade tutors accept responsibility for and interest in second grade students.
2	24	Second grade students shared benefit.
1	12	Students demonstrate reading-thinking skills.

TASKS:

NO	
04	Write into the SWRL program items to bridge gaps found in use at local setting to make it more effective.
04	Develop new items to help children in the center.
04	Write a scope and sequence analysis of approach to phonics, titled "Steps to Word Attack Mastery."
03	Devise a method where students learn to assess themselves.
04	Write reinforcement for characters in SWRL program in form of audio-flash cards.
04	Produce work wheel to produce variations of letter combinations.
04	Generate small books using cartoon characters.
29	Work with classes that have study problems.
03	Develop curriculum plans to use dictionary in 1st and 2nd levels.
04	Construct tests, for use with course.
04	Construct second year mastery test (not in SWRL).
24	Devise better ways of making tests--finer differentiation.
05	Try revision and further testing for little group that did not do well, when all rest did.
04	Make up pre- and posttest.
29	Work with groups of six children for two, three, or six weeks.
07	Train children to use SRA lab materials.
05	As teacher, act as supervisor, to keep active students occupied.
03	Devise method of encouraging higher scores and helping lower scorers.
05	Have student checkers average scores, as math reinforcements to them.
02	Get help from others in constructing tests.
03	Design the tests.
04	Provide materials for tutoring program, using flash cards and ultra flash speech test.
04	Include guidelines for interpretation of student performance in program.
06	Verify that important parts are included--phonetic analysis, following directions, interpretation and comprehension.
05	Pilot test materials in whole class with home room teacher.

ENABLERS:

S	UV	
2	01	Remembered things that were effective as classroom teacher.
1	02	Background at reading clinic--all levels.

E-02: Revisions of Student Learning Program in Multicultural Social Education (SEDL)

STANDARDS:

J	LM	
1	12	75% achievement by 75% of students.
1	06	Teachers judge objectives appropriate.
1	12	88% achievement by 88% of students was standard for expansion.
2	34	Teachers enjoy program.
2	34	Students have fun--laugh, enjoy.
1	01	Form is complete when spaces filled in.

TASKS:

NO	
05	Pilot test the Multicultural Social Education Program at this school with six teachers.
05	Observe the pilot test teachers using the program.
29	Help oral conferencer with pilot test teachers using the program.
06	Study the material to improve it.
06	Study the weakness of the program.
23	Select expanded field test sites according to ethnic student population.
06	Revise the program based on student data.
05	Gather information and data on master analysis forms and send to regional laboratory.
29	Sit down with teachers at the end of each unit and hold oral conference.
05	Fill out oral conference form.
05	Collect the data from checklists and put it all on master analysis form.
05	Review the master analysis form to determine what is wrong with program.
29	Hold orientation meeting with teachers to explain use of program.
07	Demonstrate how to use program to older more traditional teachers.
32	Bring groups of principals in to watch the students operate on program.
23	Help select satellite schools based on principals' reactions.
05	Administer TABA test as standardized test to students.
05	Administer program pretest in the fall.
05	Administer program posttest in May.
05	Analyze data from teachers.
05	Interpret data from teachers.
05	Observe and record data.
06	Teachers critique the lesson.
31	Teachers explain how to improve.
05	Review the master analysis form to determine the basic problem.

29	Emphasize that I want to observe the lesson not the teacher.
29	Emphasize the importance of data.
05	Analyze the written comments on the evaluation form.

ENABLERS:

S	UV	
1	05	Knowledge of previous success of program.
3	04	Not to push self on teacher if they did not want me.
3	02	Sensitivity to other people's problems.
3	16	Sensitivity to individuals, not classes such as black or white.
2	25	Sensitivity to older teachers being more difficult to change.
3	02	Sensitivity to older black teachers not having training.
3	16	Sensitivity to black-white problem.
3	16	Sensitivity to youth-age problem of teachers.
3	16	Sensitivity to man-woman problem of teachers.
3	22	Sensitivity to teachers' fear of consultants (educator).
2	01	Skill in teaching children--demonstrating.

E-07: Revision of Student Learning Program in Orff-Kopaly Music

STANDARDS:

J	LM	
2	34	Children enjoy themselves.
1	08	Consultants and teachers all agree on the attainment of the objective by subjective judgment.
2	34	The enthusiasm shown by students indicates success of a lesson.

TASKS:

NO	
04	Change from Hungarian folk rhythms to African beats.
02	Visit consultant to learn about Orff-Kopaly music program.
04	Write lesson plans for teaching Orff-Kopaly music program.
03	Design the lesson plans to give the children instant success in their lessons.
03	Design the lessons to make success a habit.
29	Involve the children in the lesson planning.
31	Listen to consultant lecture on the Orff-Kopaly techniques.
05	Give pre- and posttests to small samples of children.
05	Have teachers fill out lesson observation forms.
24	Call in consultants to observe students at various times.
03	Send more students in for the lesson when it is improved from last group.
07	Conduct seminars for teachers from other schools in the Orff-Kopaly methods.

07 Disseminate materials (lesson plans) to the other schools.
22 Obtain approval on budget needs from the central office.
05 Write down on observation form actual behavior of students and teachers during lesson.
04 Write lesson plans as guidelines leaving teacher some leeway to improvise.

ENABLERS:

S	UV	
1	01	Knowledge of rhythm symbols.
1	01	Knowledge of tone.
3	45	Musical sensitivity to tone distinctions.
3	03	Sensitivity to needs of children to enjoy learning.
2	02	Skill in amusing children.
3	46	A sense of humor.
2	01	Skill in teaching music.
3	03	Sensitivity to children's need for change-versatility.
2	41	Energy--good physical conditioning.
2	30	Flexible personality.
3	45	Good ear for music.
3	22	Sensitivity to short span of attention in K-3 age group.
3	04	Sensitivity to part played by teacher's personality in any lesson learning.
3	03	Sensitivity to need of students to have a male image in school, particularly in music.
2	16	Skill in singing.
2	16	Skill in playing the piano.
3	17	Realize that muscians are often temperamental.
3	34	Willing to accept criticism.

E-09: Revision of Student Learning Programs in David Weikert Early Childhood Education (SEDL)

STANDARDS:

J	LM	
1	01	Four levels of abstraction or representation adequately identified.
1	01	Four basic goal areas in "relationships" are included: temporal, spacial, seriation, and classification.
1	12	Children appear inquisitive.

TASKS:

NO
04 Write "cookbook" strategies for teachers to use, identifying

	levels of representation or abstraction.
01	Identify level of abstraction at which individual students work.
02	Establish goal areas for relationships.
02	Write behavioral objectives for one week at a time.
04	Recycle lessons from last year, utilizing response data.
02	Write complete objectives for one level of relationships, suggest objectives at other three levels.
02	Try to incorporate humanistic approach with behavioral objectives written around levels and goals.
04	Take best parts of the three programs to develop "Gateways."
04	Write rationale for "Gateways."
04	Move from "pure" Weikert to best of each bilingual from SEDL, Weikert, Distar (SRA--Ingleman).
04	Design own evaluation procedures.
04	Design a daily random assessment for objectives (for teachers needs).
02	Sets goals for week (for teachers).
04	Write cognitive awareness pre- and posttest.
03	Design procedure for measuring each concept at each level.
05	Follows testing procedure for each concept from top level down (with students).

ENABLERS:

S	UV	
2	03	Skill in writing learning packages.
2	06	Skill in adapting format from Unipak to Weikert Strategies.

P-14: Staff Development Package for Student Learning Program in SEDL.

STANDARDS:

J	LM	
2	33	Teachers' knowledge of strategies as well as skill in applying them.
2	15	Teachers' know when to employ particular strategy.
2	12	Teachers' have knowledge about objective for strategy, level of cognition involved.

TASKS :

NO	
29	Work with teachers in social studies.
29	Work with teachers city wide in staff development in social study teaching strategies.

29	Work with multiculture program materials from neighboring city.
29	Work with Hilda Taba strategies.
04	Use techniques derived from strategies to write new material for other subjects, grade levels.
21	Train teachers using 42 hours of training material with 100 teachers from satellite schools in 12 sessions.
21	Put on followup sessions in classrooms using plans developed during sessions.
06	Critique instructional plans and strategies used, using discussion analysis.
24	Give teachers some feedback about their efforts.
24	Review tapes made of work for critique.
05	Go into classroom to look at teacher's performance.
04	Prepare participant manuals to show what to do.
21	Train teachers to build discussion plans.
21	Use role playing at child level, to concentrate on process rather than content, which results from using adult-oriented Taba materials direct.
07	Get student teachers to use the plan in their own classrooms and to develop others.
31	Get feedback at subsequent meetings of the course.
07	Get teachers to use tabulated Taba strategies and add others--extemporize.
06	Workers simplify Taba strategies--still need more.
03	Develop focusing, opening (open-ended) questions.
03	By knowing the class, call on reticent ones first.
03	Develop questions leading to interpretation of feelings.
03	Accept dominant answer, then ask for "others."
21	Teach use of nonverbal expression--looks, actions.
21	Emphasize preparation for doing things unplanned, that just "pop up."
21	Teach teacher variety in question statement, to get all students "tuned in."
21	Emphasize need to get children to interpret or infer.
21	Emphasize change in teacher's role, questioner, not "teller."
21	Assist teachers with collecting data and applying feedback from data.
04	Develop staff development package for subject area.
04	Write rationale, objective of the program, participant manuals, awareness experiences using teacher role playing.
04	Develop evaluation instruments.
04	Produce visual, transparencies, with audio tapes.
04	Produce video tape of a teacher using Taba strategies (use as part of package).
04	Write discussion possibility guides for participants' manual.

ENABLERS:

S	UV	
1	05	Familiarity with Taba strategies.
2	01	Skill at working with Taba strategies.
3	30	To the behavior and thought patterns of children.
2	37	Recognizing abilities of children.

2	29	In maintaining working relationships with teachers.
2	42	In promoting feedback from teachers.

P-41: Quarterly Budget Summaries

STANDARDS:

J	LM	
1	14	Sponsor accepts the budget.
2	04	Budget is submitted on time.
2	24	Funds are expanded for things that reflect well on sponsor.
1	15	No communists allowed on budget.

TASKS:

NO	
22	Maintain an accounting record on all expenditures, projected expenditures, and budget comparisons.
04	Prepare a quarterly budget for the sponsor.
04	Supply the rationale for all items included in budget.
24	Review the budget with sponsor.
06	Eliminate people from data processing budget in early days because they were not needed at that point in time.
22	Submit a projection of cash needs each month.
22	Submit a comparison of actual expenses with projection by 10th of the month.
22	Submit a quarterly budget to the sponsor.
22	Report to Superintendent concerning budget.
22	Report to Associate Superintendent for development concerning budget.
22	Report to Assistant Superintendent for planning and evaluation concerning budget.

ENABLERS:

S	UV	
3	01	Sensitivity to desire of sponsor that every dollar goes to improve education of disadvantaged youngsters.
1	06	Knowledge through experience of what the sponsor will reject.
1	21	Knowledge of business operations.
2	44	Skills in accounting.
3	16	Sensitive to public image of sponsor.

P-43: Process Evaluation Report for Revised Student Learning Program

STANDARDS:

J	LM	
2	39	Evidence in design of preplanning--e.g., where is next stage going?
1	12	Procedures adequately investigate the effects of the program.
1	21	Data collected on adequate control groups.
1	11	The questions are ones they want answered for this project.
1	01	The sampling procedures used permit answering the questions.
1	05	The results are as generalizable as possible.

TASKS:

NO	
24	Look at the questions in general to see whether they are comprehensive and are answered by design.
06	Examine results to see whether questions are answered.
06	Look at sampling procedures to see if adequate.

ENABLERS:

S	UV	
1	03	Research design applicable to question to be answered.
2	10	Understanding inferential statistics.

C-53: Parental Involvement Program

STANDARDS:

J	LM	
1	22	Numbers of parents become involved in their choice of helping activity.
2	07	Presentation made at one neighborhood church every Sunday.
2	17	More than 500 parents a month go through the homemaking program.
2	17	25% of enrollees in black studies course are white.
2	17	Support (attendance) from wide geographical area on many programs.
2	17	They have surpassed expectations in more programs than they would have planned--effect of self-motivation.

TASKS:

NO	
02	Write community--embracing objective as goal for activities and statement of individual goals.
01	Visit several major cities throughout the nation seeking suitable programs.
23	Set up Lay Advisory Group to determine needs of various segments of community; children and adult.
33	Lay Advisory Group changed the composition of the school boards.
01	Study economic and social needs as well as educational needs of community--first welfare needs.
29	Attempt to reach parent through children, using program that child is interested in.
29	Let the parent contacted know that program exists to help (1) child, (2) parent, (3) community--in that order.
01	Be careful to promise only what program can and will do.
29	Show interest in condition at home and neighborhood.
29	Show interest in religious affairs through churches.
29	Associate with all kinds of characters in community.
29	Make each parent an important factor in the program.
07	Educate parents to accept decision-making role for school and community.
29	Encourage parents to bring in ideas; to volunteer help.
04	Develop PAL (Parent Assisted Learning) program.
29	Help parents find avenue to volunteer.
25	Let participating parents recognize that they are succeeding in the program.
29	Use volunteer help in swimming program, e.g., when school not in session.
04	Write booklet, "How to Implement Parental Involvement."
04	Publish newspaper. (16-page)
04	Prepare Early Childhood Handbooks for parents.
04	Complete Parental Participation Handbook to show how schools can encourage parental participation.
31	Conduct monthly meeting with all parents of early childhood children.
29	Work with parent on how to teach children.
01	Determine interests of groups of parents.
29	Provide classes to meet interests, e.g., ceramics.
23	Get permission to make presentations at neighborhood churches.
31	Put on programs at churches to get support of community. Arrange to make presentation at one church every Sunday.
04	Establish adult-based education.
26	Promote completion of high school education.
04	Initiate programs in typing, sewing.
29	Sponsor: oratorical contest, Campfire Girls, counseling programs for girls, PTA, Lay Advisory Committee, Early Childhood Advisory Committee, PAL Program, Suzuki music program, homemaking program.
29	Avoid terms like "home economics," but offer content in terms understood to them.
25	Establish self-realization concept across other programs.
04	Incorporate "black studies" presentations, using local, successful blacks.

04	Establish Red Cross volunteer program in first aid.
25	Conduct voters registration drive; encourage to vote.
29	Conduct income tax seminar.
29	Set up seminars on drug abuse.
29	Sponsored summer program in recreational activities.
29	Establish young adult club; to prepare future parents for involvement.

ENABLERS :

S	UV	
3	01	Have to love people.
3	13	Sensitivity in using language people understand.
2	02	Must be prepared to reach everyone in community on person-to-person basis.

C-54: Coordinated Curriculum

STANDARDS :

J	LM	
1	26	Test items are developed according to levels of thinking.
1	19	Test items test what they should be testing.
1	12	Findings show effectiveness of learning against specified objectives.
1	04	Wording is in a form that any teacher will understand what the curriculum material is talking about.
1	16	Writing is within the field--it has construct validity for purpose.
2	17	Home-based teachers view involvement in center as "promotion."

TASKS :

NO	
21	Appoint working center curriculum coordinators.
21	See that working center coordinators understand data collection or subject of working center.
24	Supervise remedial efforts necessary in working centers.
21	Make recommendations for new staff selection.
25	Discuss interpersonal problems.
22	Monitors budget allocated to each center for cost/effectiveness.
22	Check requisitions against cost/effectiveness and budget allocation.
31	Schedule a meeting for a day, one a week, with each center.
25	Goes over program objectives, philosophy, and rationale.
24	Check what curriculum centers have done.
33	Discuss where we go from here.

26	Help curriculum writers to write objectives in behavioral terms.
26	Help them to write and match test items to objectives.
25	Discuss goals with staff.
31	Have outside consultants come in to help with developing media, objectives, and test items.
29	Work with center teachers in development of reports.
24	Critique final work.
24	Consultants validate work done, as to whether it is within specified curriculum objectives and within organization of field as it should be.
30	Coordinate consultant interaction.
24	Make recommendations on acceptance of material based on findings.
21	Train staff in curriculum writing.
31	Hold organizational meeting twice a week.
04	Coordinate total evaluation report for foundation.
21	Allow curriculum writers to write lesson plans until they have grasped significance of writing objectives.
29	Work for team approach between writer and teacher by interchanging roles.
07	Work to involve home-based teachers in center activity.

ENABLERS:

S	UV	
2	42	Skill in inquiring to fill in gaps; to convey what is lacking.
3	19	Sensitivity in communicating inadequacies in way that is not seen as "ugly" or unkind.
3	01	Sensitivity to different teachers' expectation of teachers.
1	01	Knowledge of general curriculum.
2	19	Skill in administration of school staff.
2	29	Skill in getting groups of people to work together as group.
2	43	Skill in building confidence to write curriculum.
2	02	Skill in overcoming resistance due to background.
3	04	Realizing importance of real people-to-people interactions.

C-55: Pupil Personnel Services

STANDARDS:

J	LM	
1	13	Standards of professionals: social workers, counselor, nurse.
1	25	Acceptance of program by community.
1	05	Provides for needs, rather than solving problems.
1	12	People devise their own lessons that they are "comfortable with."
1	05	Relieves anxiety by giving parent specific behavior to turn to in order to help work on his problem.

1 05	It teaches an approach to raising children, to relating to children, that can be measured by control.
2 34	The school knows the department as the "school helpers."
1 22	Children come with any problems they have.
2 34	Successful responses from groups using programs.
1 12	Children reflect insights, once communication is established.
1 05	Achieving greater exactness in choice of multidiscipline approaches.

TASKS :

NO	
02	Direct services of department to children.
05	Assist in conducting surveys needed by other departments.
05	Assist in collecting information from home.
31	Respond to problems in class.
29	Interpret the activities of the Pupil Personnel Services Department to the community, so they will understand it and accept it.
23	Develop community resources not yet apparent.
07	Let community know what resources are available.
04	Develop specific, packaged programs that can be used in other communities.
04	Develop packages that teach behaviors: attending schools regularly, relating with peers, working toward goals.
31	Answer needs by programs and children.
05	Measure what impact efforts have on problem areas.
05	Gain insights of relationships: what causes what.
03	Find ways of training staff people.
03	Develop two methods of counseling 1. Object and activity counseling 2. Group (family) counseling: activity contracting.
29	Help child, parent, and teacher see the problem.
29	Suggest specific activity to solve the problem.
29	Persuade them to contract to perform the activity.
31	Send children for indepth care (e.g., dental).
29	Get parents involved in doing this rather than doing it with parental permission.
04	Write some medical programs to aid parents in health care before they get to a doctor.
05	Note problems producing referrals, open or from teachers, parents.
05	Note the causes of problems; determine how to productively alleviate them; what kind of information experiences are necessary?
04	Develop package directed to fulfilling student referral needs.
03	Designed package of nine lessons for mothers and daughters (6th grade level) to help understand that girls are passing through changes.
05	State reason for differences in girls that (6th grade) age, kinds of things they are facing.
05	Share information about growing up, problems involved.
05	Encourage communication between mothers and daughters.
05	Teach skills to get along with people, particularly boys (with groups of girls who help evaluate the learning package).
06	Revise for second group of girls.
05	Repeat sequence as necessary.
04	When successful, package for distribution to other counselors.

04	Produce package on test taking.
01	Determine factors that prevent good performance in tests.
05	Spend time (over several months) observing and listening in and out of community to sensitive to answers.
06	Use change of language to communicate with children.
04	Develop tests using comic strip kind of things pictorial tests.
03	Understand the kinds of insights children acquire and pass these on to curriculum writers.
01	Determine learning styles in children.
24	Learn to operate as a team--more and more efficiently--to bring team approach to situations.
03	Develop ways of interpreting results of test to teachers.
26	Develop workshop-type programs to help teachers understand children in general way.

ENABLERS:

S	UV	
1	04	Knowledge gained from training as educational psychologist.
2	25	Skill in observing behavior.
3	04	Skill in interpreting meaning of behavior.
3	36	Sensitivity to be free enough and secure enough to interpret the whole observation into some meaningful pattern.
3	36	Openness and security in personal relationships.
3	28	Freedom, when need of skill is recognized, to go out and acquire it, with workshop or course.

P-56: Product Evaluation Report

STANDARDS:

J	LM	
1	12	80% of the children master objective (80% of total score).
1	13	80% of the teachers said it was better than average in terms of pupil attention.
1	08	Revisions are accepted by group consensus.
1	12	Criterion for whole program is acceptable norm score on standard test.

TASKS:

NO	
06	Revise checklist and observation form as required.
05	Summarize the data on all of the checklists and observation form.
01	Define set of variables to be measured.

02	Define how variables are to be measured.
02	Determine the questions to be answered in the evaluation.
03	Decide the instruments necessary for measurement.
03	Determine the procedures necessary for applying instruments and collecting data.
05	Draw conclusions from results of data reduction.
02	Generate questions based on anticipated program results.
22	Forward a copy of data and report to the regional laboratory.
22	Provide data and report to staff development personnel.
03	Help teachers translate from general concept to measurable indicator for mastery of the concept.
05	Systematically measure the attainment of specified objectives.
31	Request technical advice from central office on advanced statistical methods.
03	Write experimental design for product evaluation report.
03	Request computer program for specific statistical techniques.
05	Calculate the effectiveness of program.
22	Calculate effectiveness of program in terms of per pupil cost.
06	Help teachers add new objectives to program where considered appropriate.
22	Report result of data analysis to center.

ENABLERS :

S	UV	
1	02	Knowledge of basic, not higher, statistics.
1	12	Knowledge of who is available for statistical consultation.
2	24	Skill in writing behavioral objectives.
1	04	Knowledge of computer programming.
1	22	Knowledge of computer capabilities.
3	17	Sensitivity to other peoples' sensitivities.
1	03	Knowledge of developmental research as opposed to classical basic research.
1	03	Knowledge of developmental procedures such as those advanced by Popham and Farquar.
1	03	Knowledge of criterion-referenced testing techniques and concepts.
3	21	Sensitivity to the fact that there are some things which can not be measured with a pencil and paper.
1	06	Knowledge of costs in teaching.
1	03	Knowledge of similar evaluation forms.
1	02	Knowledge of the primary components of curriculum.
2	25	Skill enduing evaluation-testing instrumentation.

C-57: Staff Acceptance of Change

STANDARDS:

J	LM	
2	24	Lowest cost/effective ratio determines acceptance of a program.
2	34	Good child interest helps determine acceptance of program.
2	34	Good staff morale indicated by social involvement of teachers outside of school.
2	14	Sixth sense indicates if something is right.

TASKS:

NO	
24	Replace some of the most traditional teachers.
33	Share the power with teachers--but do not lose it.
22	Define the limits then give others complete power within limits.
26	Suggest and allow--but do not force outside socializing.
29	Focus on the benefit of the program to children, not on personalities.
25	Ask teachers what they want.
22	Determine cost of program per pupil per year.
33	Change job title from Master Teacher to Center Teacher.
33	Suggest and allow a teachers' advisor group.

ENABLERS:

S	UV	
1	06	Knowledge of power structure.
3	16	Sensitivity to black problem in a southern city.
3	16	Sensitivity to white prejudice about black capacity.
3	03	Sensitivity to children's need for firm but gentle discipline.
3	03	Sensitivity to teachers' need for definition and limitations of responsibility.

CASE PROFILE NO. 18

Written by

Norman H. Crowhurst

PROJECT TITLE: Educational Resources Information Center
Processing and Reference Facility

(ERIC Project)

AN EDUCATIONAL DIFFUSION PROJECT CONCERNED WITH: Providing a professionally useful educational information center (or complex of centers) through which educators may keep abreast of the growth of educational resources.

A PROJECT OF: Leasco Systems and Research Corporation
4833 Rugby Avenue
Bethesda, Maryland 20014

This profile has been prepared according to

PROFILE FORMAT No. 3

Three profile formats are represented in this volume. The reader should refer to this number when making use of the reader's GUIDE to the profiles.

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Chapter I: Overview

This overview presents a brief synopsis of the ERIC Project as an introduction. This is elaborated by a discussion of the objectives, rationale, and significance of the project and the context in which it operates

Synopsis of the Project

Title: Educational Resources Information Center Processing and Reference Facility.

Responsible Institution: Leasco Systems and Research Corporation.

Funding Source: U.S. Office of Education.

Funding Duration: January 1970 to November 1972. (34 months)

Observation Date: May 1971.

Stage of Development: Mid-Project.

RDD&E Focus of Project: Educational diffusion.

Expected Outcomes:

1. *Current Index to Journals in Education*.
2. *Research in Education*.
3. *Current Project Information*.
4. *Manpower Research*.
5. *Pacesetters in Innovation*.
6. *Research in Education Cumulative Index*.
7. *New Projects*.
8. Quick Available Document Service.
9. Maintained Thesaurus.
10. Source Authority Directory.
11. Field Reader Catalog.
12. Magnetic Tape of Various Categories of Data.
13. Computer-stored Data.
14. Microform Outputs.

Level of Funding and Duration: Medium-High. (level 5 of 7 levels)

Agency Setting: Private industry.

Staff Summary: There are 19 personnel on this project and all devote full time to it. The staff consists of a director, a deputy director, a reference analyst, a lexicographer, 3 systems analysts, 4 document analysts, a secretary, a clerk-typist, and 6 data input and control personnel.

Objectives, Rationale, and Significance of the Project

Objectives. Understanding the objectives of the facility that constitutes this project requires a brief background about ERIC as a whole. The acronym, ERIC, stands for Educational Resources Information Center. These resources consist of publications (such as journal articles, magazines, periodicals, and books), papers, theses, and reports of projects being conducted within education. Included are notations about the institutions and people who conduct such projects.

ERIC devotes attention to collecting and diffusing information about these educational resources. It functions through a number of clearinghouses, each of which handles such information within a specific domain. A brief statement, agreed upon throughout the ERIC system, outlines each clearinghouse domain. Figure 1 sets forth this general schematic of the ERIC system, while Table 1 lists the designators and locations of the currently active clearinghouses.

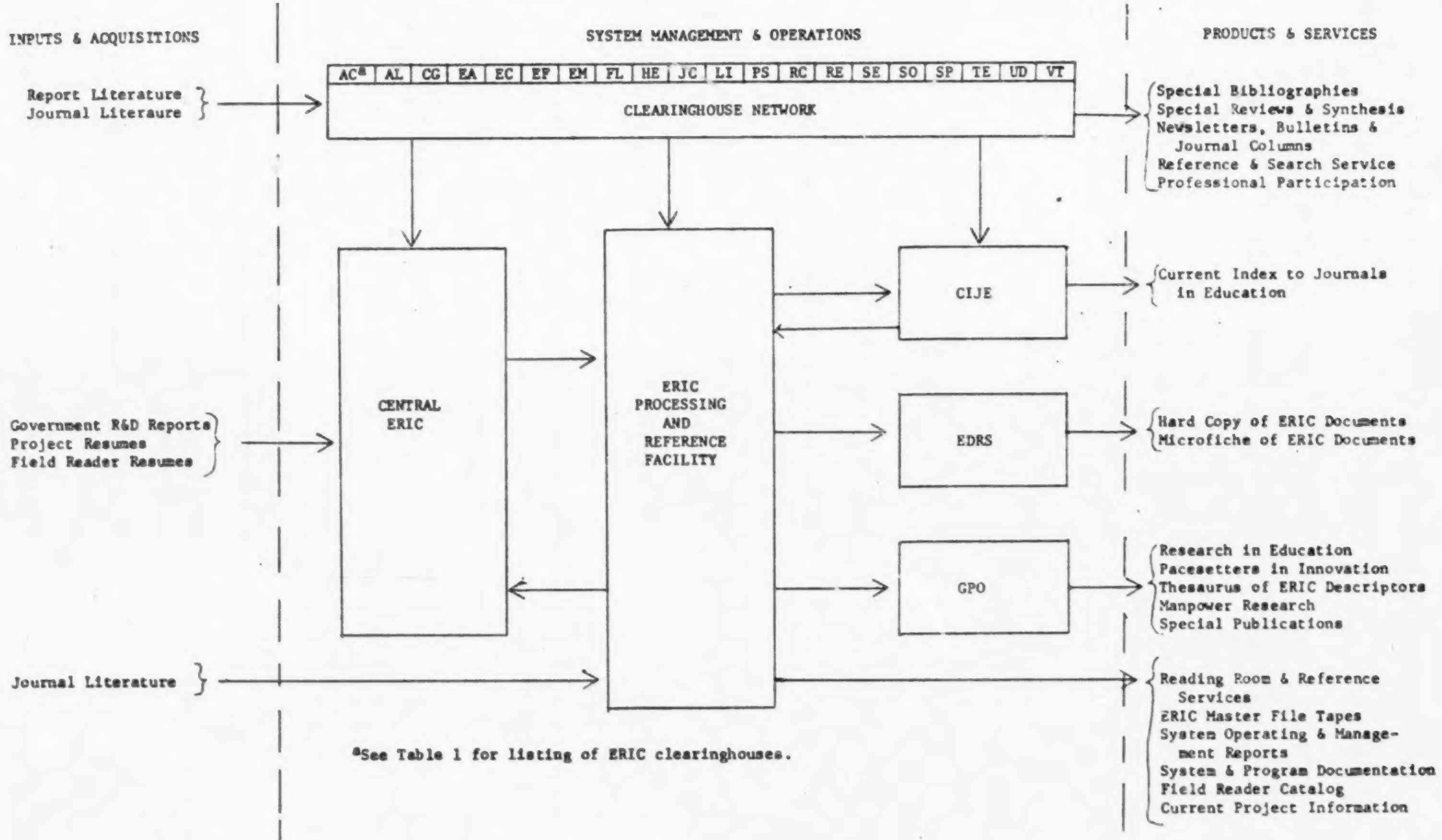
The facility described in this profile is the block in the center of Figure 1, indicated as the ERIC Processing and Reference Facility. The flow of material in this figure indicates that much of the enormous mass of information handled by the clearinghouses does not get handled by the personnel in this center, although all index data about it eventually gets stored in the data bank operated by the center.

The emphasis of functions presently performed by this facility is on processing and reference. These are the mechanisms by which data get into the data file of the computer and are checked. Included is a monitoring of the references by which data are correctly located, stored, and retrieved in the various retrieval forms.

Leasco Systems and Research Corporation sees the facility as more than a clearinghouse for clearinghouses. Based on Leasco's previous experience with somewhat similar information systems, they see the ERIC system as somewhat analogous to a highly sophisticated reference library, the organization of which is quite difficult because of the enormous quantity of material and the diverse intersection of interests within it. Within this context, the construction of "clean" classification sets is complicated.

Thus, while the comprehensiveness of input to the system is meant to insure that virtually all current information that is relevant to education gets into the system, the user is faced with the problem of where or how to look for the information he desires. The guides presently provided by no means always ensure that the user will be led to the precise information he is seeking, or to all he is seeking within a category in the terms by which he designates that category.

In a library of limited size, a well-informed librarian can prove of inestimable help to the user. For any individual or group of individuals to attempt to assume this role relative to a system with the magnitude and complexity of content handled by ERIC is physically and humanly impossible. But this does not say that it is systematically impossible. Therefore, the


INPUTS & ACQUISITIONS
SYSTEM MANAGEMENT & OPERATIONS
PRODUCTS & SERVICES
AC[a]
AL
CG
EA
EC
EF
EM
FL
HE
JC
LI
PS
RC
RE
SE
SO
SP
TE
UD
VT
CLEARINGHOUSE NETWORK
Report Literature
Journal Literaure
Government R&D Reports
Project Resumes
Field Reader Resumes
Journal Literature
CENTRAL ERIC
ERIC PROCESSING AND REFERENCE FACILITY
CIJE
EDRS
GPO
Special Bibliographies
Special Reviews & Synthesis
Newsletters, Bulletins & Journal Columns
Reference & Search Service
Professional Participation
Current Index to Journals in Education
Hard Copy of ERIC Documents
Microfiche of ERIC Documents
Research in Education
Pacesetters in Innovation
Thesaurus of ERIC Descriptors
Manpower Research
Special Publications
Reading Room & Reference Services
ERIC Master File Tapes
System Operating & Management Reports
System & Program Documentation
Field Reader Catalog
Current Project Information

[a]See Table 1 for listing of ERIC clearinghouses.

FIG. 1. General schematic of the ERIC system.

TABLE 1

Current List of ERIC Clearinghouses

AC	Adult Education	Syracuse University, Syracuse, New York
AL	Linguistics	Center for Applied Linguistics, Washington, D.C.
CG	Counseling & Personnel Services	University of Michigan, Ann Arbor, Michigan
EA	Educational Management	University of Oregon, Eugene, Oregon
EC	Exceptional Children	Council for Exceptional Children, Arlington, Virginia
EM	Educational Media & Technology	Stanford University, Palo Alto, California
FL	Foreign Languages, Teaching of	Modern Language Association of America, New York City
HE	Higher Education	George Washington University, Washington, D.C.
JC	Junior Colleges	University of California at Los Angeles, Los Angeles, California
LI	Library and Information Sciences	American Society for Information Science, Washington, D.C.
PS	Early Childhood Education	University of Illinois, Urbana, Illinois
RC	Rural Education and Small Schools	New Mexico State University, Las Cruces, New Mexico
RE	Reading	Indiana University, Bloomington, Indiana
SE	Science and Mathmetics Education	Ohio State University, Columbus, Ohio
SO	Social Science Education	University of Colorado, Boulder, Colorado
SP	Teacher Education	American Association of Colleges for Teachers Education, Washington, D.C.
TE	Teaching of English	National Council of Teachers of English, Champaign, Illinois
TM	Tests, Measurement & Evaluation	Educational Testing Service, Princeton, New Jersey
UD	Disadvantaged	Teachers College, Columbia University, New York City
VT	Vocational & Technical Education	Ohio State University, Columbus, Ohio

objective of the ERIC Processing and Reference Facility, which is maintained by Leasco, is to enable the ERIC system to meet the users' needs in better ways, much as the presence of a good librarian in a small library can be very helpful to the uninitiated user.

Rationale. Why does a user fail to find what he wants in such a system as this? There are two possible answers, each of which can break down into subdivisions. One is that the information he seeks is not in the system. The other is that it is in the system, but the organization of the system in some way obstructs his finding it.

If the information is not in the system, it may be because its source is not coupled to the system as an input. This becomes less likely as the system acquires more input sources through time. A more likely cause, at the time Leasco assumed responsibility for the facility, was that the information had not yet completed its path through the processing mechanism into the storage bank with the necessary means for its retrieval. In a system that relates to a technology advancing as rapidly as today's and that handles the enormous volume of data entering ERIC's many clearinghouses, reducing delay so that "if it's happened yet, it's in ERIC" presents considerable problems.

This facility, as operated by Leasco, has devoted considerable effort toward improving efficiency and shortening the entry-delay time, resulting in improvements that became evident from examination of the project in detail.

Inability of the user to find items that are present within the system can derive from one of many potential disabilities of the system. The major emphasis of the item may differ from the one for which the user wants it, so that he does not look in the place where it was quite logically entered. Helping to reduce this cause of deficiency requires closer attention to cross-referencing kinds of functions, which can become extremely elaborate in a system such as this.

The system already provides a number of ways of looking for wanted items, but these can have defects that result in the user's failure to locate correctly the item he seeks. What is his basis for seeking it? Has he heard of a specific item, either by title, by subject matter contained, or by the personal or corporate author of the item, or does he just want whatever may be available within a specified domain of interest? The way he seeks will vary according to the answer to this question, and each of these ways of seeking can have its own variety of causes for the user's failure to find what he seeks. For example, he may know only the corporate source of the work reported on. Such a corporate source can, for brevity, be styled in a variety of ways, selecting only some of that string of identifiers. Yet for identity within the system, such a single source must have only one entry (although cross-referencing can help, for the user). Each corporate source must have only one identifier within the system, which will receive a code so that all items received from that source are similarly identified. Eliminating different entries that identify the same corporate source is an example of a step toward minimizing this cause of difficulty to the user.

Significance. As the hub of a network of information centers or clearinghouses, this facility receives feedback about its effectiveness both from the clearinghouses with which it works in generating data, and from the audiences it serves in providing information. From both these sources of feedback, the quantity and content of favorable feedback indicate that the objectives are being progressively attained.

Context in Which the Project Operates

At the point in time when this project was visited, Leasco Systems and Research Corporation was operating it under a contract to the U.S. Office of Education (USOE). The facility of Leasco where this project operates was set up specifically for the operation and is located in Bethesda, Maryland. Prior to establishment of this facility, the company had established service capabilities having offices in various cities across the country.

Relationship to parent agency. Each group or subsidiary in the Leasco chain operates as a complete, self-sufficient entity, chartered to function within a specified business area. Figure 2 illustrates the Leasco organization chart. The ERIC facility was formed under the Facilities Management group found in the bottom right corner of the chart. The Leasco organization had previously acquired the expertise in closely related information-service activities that enabled it to staff this project with personnel having the necessary competence.

Relationship to funding agency. The central responsibility for the total ERIC system rests within USOE, identified as "Central ERIC" (Figure 1). Central ERIC monitors the activity of the Leasco-based facility. The project, though, has a strong commitment to monitor itself for quality, which includes eliminating redundancy and determining that entries within the system accurately represent the information they describe. This commitment to quality also includes a commitment to time lines, because time is an essence of quality in such a setting: if information is not available from the system within a reasonable (which virtually means the shortest possible) time, the system loses some of its value.

As both Central ERIC and this facility are central to the clearinghouse system, they maintain a close working relationship with one another. The interviewers visited Central ERIC, although formal interviews were not conducted there, and the essence of the information there obtained was that the performance of the Leasco Corporation is a definite improvement over the earlier activity within the corresponding facility. This, as the interviewing on the project itself evoked, is largely due to the project's commitment to quality and cost-effectiveness, including time-delay reduction as part of the definition of "quality" in this context.

Relationship to individual clearinghouses. The titles and locations of individual ERIC Clearinghouses are listed in Table 1. The connecting lines on Figure 1 illustrate the flow, which is two-way. While this consists primarily of a somewhat mechanical shipment of material at regular intervals, whose schedule may be changed from time to time to

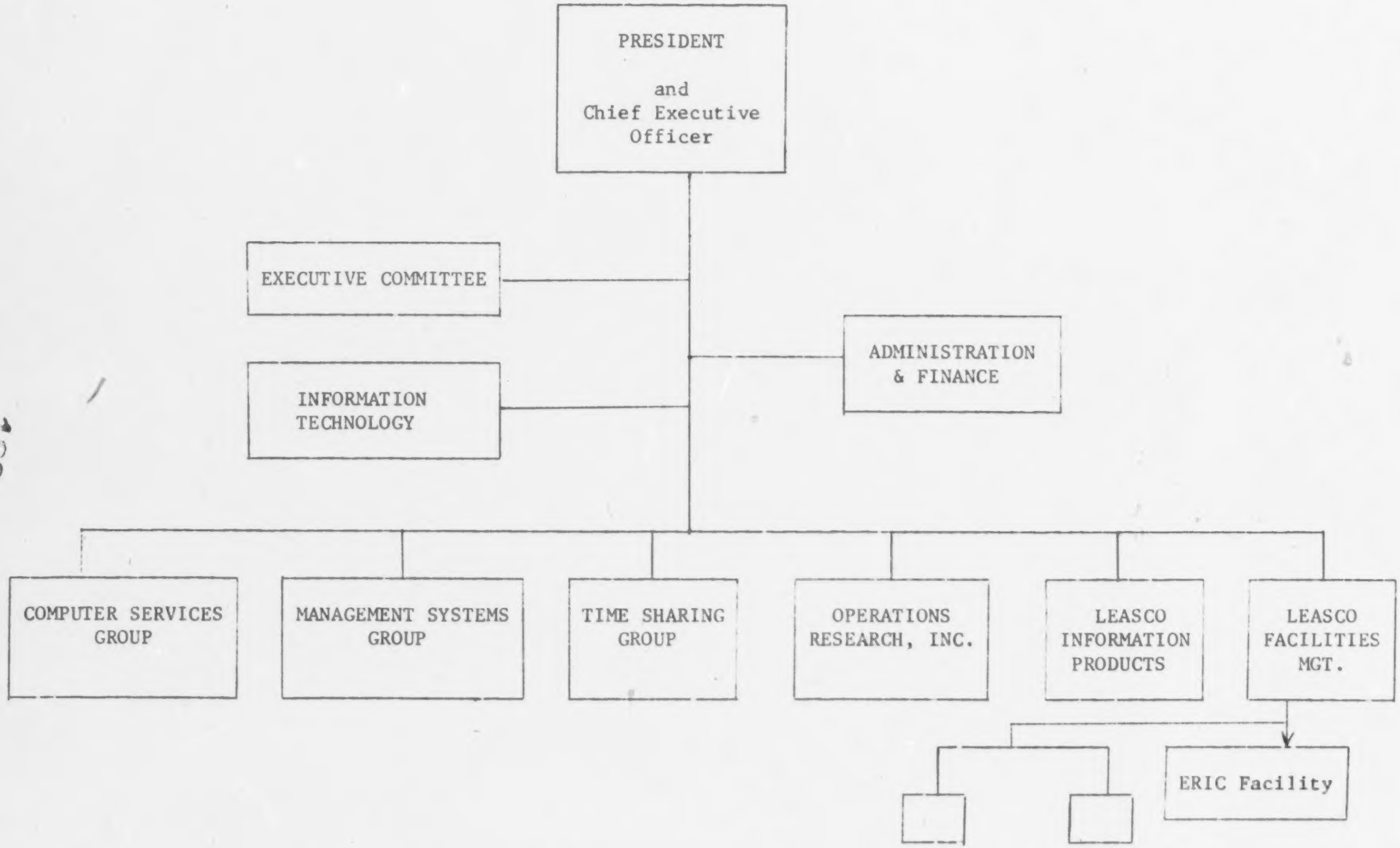

PRESIDENT and Chief Executive Officer
EXECUTIVE COMMITTEE
INFORMATION TECHNOLOGY
ADMINISTRATION & FINANCE
COMPUTER SERVICES GROUP
MANAGEMENT SYSTEMS GROUP
TIME SHARING GROUP
OPERATIONS RESEARCH, INC.
LEASCO INFORMATION PRODUCTS
LEASCO FACILITIES MGT.
ERIC Facility

FIG. 2. Leasco organizational chart.

optimize cost-effectiveness and production-time efficiency, a virtually continuous contact is also maintained to coordinate domains, thesaurus definitions, etc., across the entire field in which this facility serves a central function.

Sources of information for the system as a whole (all the clearinghouses plus this central facility) are various educational publications (issued at various intervals by a wide variety of publishers), reports of ongoing projects in education (including terminal reports), papers covering educational topics, and agencies performing work on such projects as well as the individuals engaged in them.

Chapter II: Parameters of the Project

Project Structure

Chapter I has outlined the context of the system within which the ERIC facility operated by Leasco operates. The organization of this project lends itself to being viewed in several dimensions. Figure 3 is an organizational representation, showing the structure of this facility. Figure 4 is an output map representing the dependence of various products and events upon one another. Figure 5 is a portion of a master time-line chart.

Because of the magnitude of the project, each of these representations can only show a portion of the total picture, even in its own dimension. For example, the master schedule (Figure 5) shows only events related to the production of the major product, Research in Education (RIE). However, as all other products on their different time lines dove-tail with production of this major product, this contains the key information.

Figure 5 is, in fact, a portion of the master schedule for RIE. (This is Output P-19 in the listing to follow.) In an earlier form of this schedule, steps in the production of a greater number of products than shown in the current version were presented. This made the schedule so complex to read that the effect was to discourage personnel from taking the time to refer to it. However, making it more simple in the form shown has enabled personnel to make more rapid reference to it. The interrelations between the major product steps and steps for other products are known to the people who work on each, so that this chart essentially carries all of the information necessary for production.

Project Roster

The professional staff within the project are as follows. Those who were interviewed are indicated as such:

1. Director - Senior Principal Information Scientist: This person is responsible for overall management and coordination of the facility. This includes control, cost accounting, cost reductions, forms design, procedures, product specifications, production control, reporting, scheduling, and statistical reports. (interviewed)

2. Deputy Director - Principal Information Scientist: In a secondary capacity, he shares in the responsibilities listed for the Director.

3. Lexicographer: He is responsible for maintaining the source authority file and the thesaurus. The source authority file is a listing of corporate sources or authors from which documents (papers, reports, articles, etc.) are received about which data is entered into the system. This file must have a unique code, without duplication, for every corporate source. The thesaurus is an active file of descriptors used for reference entry to the data. To be included as a descriptor in the thesaurus, a

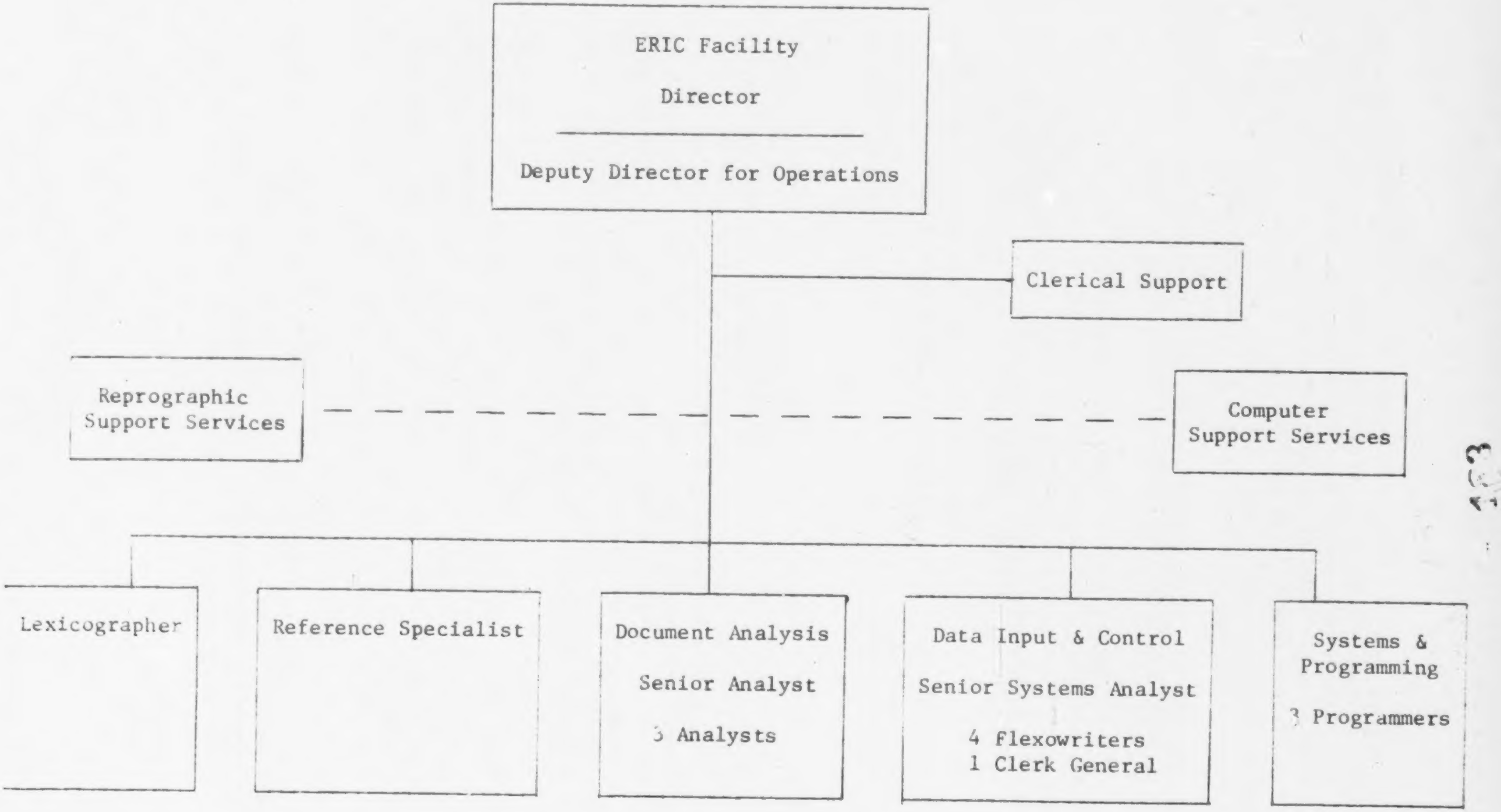

ERIC Facility
Director
Deputy Director for Operations
Clerical Support
Reprographic Support Services
Computer Support Services
Lexicographer
Reference Specialist
Document Analysis
Senior Analyst
3 Analysts
Data Input & Control
Senior Systems Analyst
4 Flexowriters
1 Clerk General
Systems & Programming
3 Programmers

FIG. 3. ERIC facility organization chart.

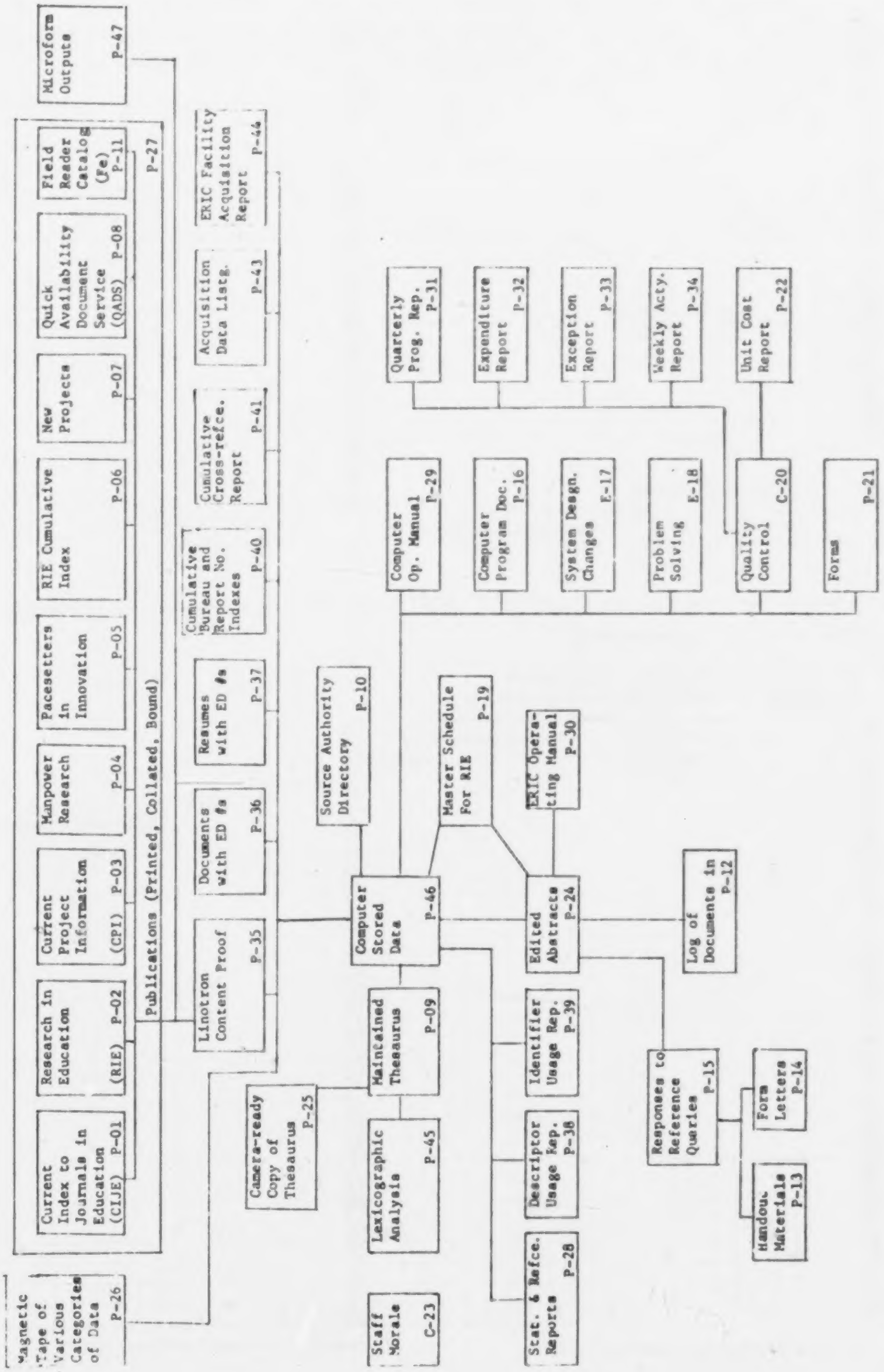
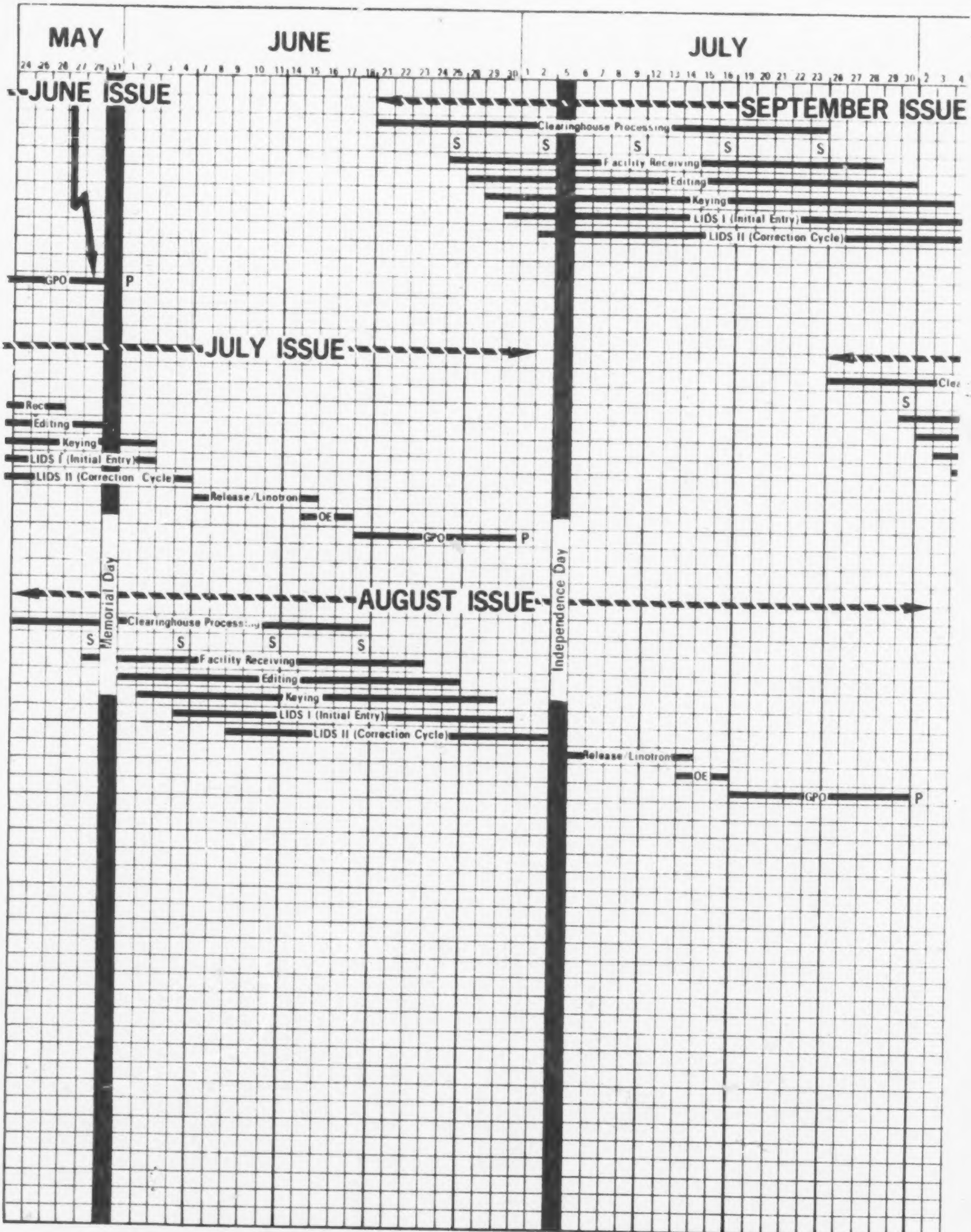

Magnetic Tape of Various Categories of Data P-26
Current Index to Journals in Education (CIJE) P-01
Research in Education (RIE) P-02
Current Project Information (CPI) P-03
Manpower Research P-04
Pacesetters in Innovation P-05
RIE Cumulative Index P-06
New Projects P-07
Quick Availability Document Service (QADS) P-08
Field Reader Catalog (Fe) P-11
Publications (Printed, Collated, Bound) P-27
Microform Outputs P-47
Linotron Content Proof P-35
Documents with ED #s P-36
Resumes with ED #s P-37
Cumulative Bureau and Report No. Indexes P-40
Cumulative Cross-refce. Report P-41
Acquisition Data Listg. P-43
ERIC Facility Acquisition Report P-44
Source Authority Directory P-10
Computer Stored Data P-46
Master Schedule For RIE P-19
ERIC Operating Manual P-30
Edited Abstracts P-24
Log of Documents in P-12
Computer Op. Manual P-29
Computer Program Doc. P-16
System Desgn. Changes E-17
Problem Solving E-18
Quality Control C-20
Forms P-21
Quarterly Prog. Rep. P-31
Expenditure Report P-32
Exception Report P-33
Weekly Acty. Report P-34
Unit Cost Report P-22
Camera-ready Copy of Thesaurus P-25
Maintained Thesaurus P-09
Lexicographic Analysis P-45
Identifier Usage Rep. P-39
Descriptor Usage Rep. P-38
Stat. & Refce. Reports P-28
Staff Morale C-23
Responses to Reference Queries P-15
Form Letters P-14
Handout Materials P-13

FIG. 4. Output map.



S indicates Clearinghouse Shipping Dates

P indicates scheduled Publication Date

FIG. 5. Section of master schedule for Research in Education publication.

term must have information about its use completed on a descriptor justification form. The lexicographer's function relative to updating the thesaurus consists of administering such descriptor justification forms in appropriate fashion and of devising ways of facilitating referencing by use of lexicographic analysis and appropriate identifiers in the identifier file. This is a listing of words not appropriate for use as descriptors (it can include specific project identifiers), but which may appear as cross-referencing aids to locating specific items.

4. Reference Specialist: He assigns the documents received by this facility to the clearinghouse into whose domain it falls. Many documents that fall quite obviously within a specific clearinghouse's domain are sent directly to that clearinghouse without need for this reference service. This specialist also maintains clearinghouse publication collection from each clearinghouse, produces handout materials, and attends to reference queries by correspondence and telephone. (interviewed)

5. Senior Document Analyst and Three Document Analysts: Within the respective information domains of the publications, these people process material for the following publications: Current Index to Journals in Education (CIJE), which lists standardized information about articles in such publications; Current Project Information (CPI), which lists standardized information about educational projects; Manpower Research, listing standardized information on this subject; Pacesetters in Education, giving information about the most significant developments; Research in Education (RIE), reporting standardized information extracted from research reports; New Projects, similar listings about new projects; RIE Cumulative Index, a facilitator to finding a specific reference within the year.

This group is also involved in processing material for the Quick Availability Document Service, which is an expedited service for documents about which information may be requested at shorter notice than it would normally become available from the system. (senior document analyst and one other interviewed)

6. Senior Systems Analyst and Assistants: This department is responsible for computer processing, data input systems, photocomposition, programming, performing trial runs to detect and eliminate faults in the programming system, maintenance of programming and reprogramming, conducting studies on the data content stored in the sytem, designing and documenting the design of the system, and maintaining a tape library of the stored data. (senior analyst interviewed)

7. Document Control and Data Processing: The people in this department are responsible for the routine processing: accessioning, acquisitions, data reports, data input, keypunching, flexowriting and paper tape conversion, dispatch/mailing, duplicate checking, logging, receiving, reproduction/printing liaison, serial control, wrapping.

Outputs of the Project

Whether or not the ERIC system was seen as a diffusion project from its inception, which is doubtful in view of the fact that the concept of diffusion as a function within education is probably newer than the ERIC system, the present functioning of the system undoubtedly serves a diffusion function. However, it differs from more specific diffusion efforts in that the information diffused by ERIC covers the entire educational information front, of which any given "customer" may require any specific element he desires, and in that the customer usually knows, but not invariably, what he wants, so that the diffuser does not have to operate a "marketing mechanism" in the usual sense.

The ERIC system has some interesting facets as a diffusion system. It operates with a tight interrelationship between processes that continue to generate the outputs to be diffused and those outputs themselves. While the project is strongly output oriented, the process receives strong attention as the means of generating those outputs.

The following list differentiates the outputs shown in the output map of Figure 4. Central, ongoing outputs of the project are the thesaurus,(P-09), that lists descriptors actively in use of accessing data; the source authority directory, (P-10), that lists all corporate author sources; and the computer-stored data,(P-46), that holds all data fed into the system for future retrieval.

These three ongoing items organize and provide the source of information to be diffused. Some principal means of diffusion are the various publications (P-01 through P-07), the quick availability document service (P-08), the field reader catalog (P-11), which together,after being produced by various outside agencies,make up the collection of publications (P-27). A parallel form of output for the same diffused material uses microform (P-47) instead of the printed page.

With this general introduction to the main products, the following are descriptions of these and supporting products, followed by events and conditions needed to maintain their production. The arbitrary identification number indicates whether the output is a product (P), event (E), or condition (C), and includes a sequential numeral irrespective of P, E, or C. Also, the output is indicated in the following listing as to whether or not it was interviewed around, and whether it is a focal, component, or facilitating output.

Products.

P-01. Current Index to Journals in Education (CIJE). A monthly publication for which copy is prepared from data processed by this facility, to be printed and circulated by a separate agency. It reports on articles published in the wide range of educational journals within minimum time delay after the original publication. (focal product)

P-02. Research in Education (RIE). A monthly publication of reports on research in education, prepared to standard format. Copy is prepared from data processed by this facility, to be printed on a prescribed schedule by the Government Printing Office. (focal product, interviewed around)

P-03. Current Project Information (CPI). An additional periodical publication containing details about current projects in education, and prepared by standard format from data processed by this facility for publication elsewhere. (focal)

P-04. Manpower Research. Inventories of manpower available within research. It is issued on a fiscal-year basis and is prepared from data processed by this facility. (focal)

P-05. Pacesetters in Innovation. A report of innovative programs published annually from data processed by this facility. (focal)

P-06. RIE Cumulative Index. RIE is a monthly publication of considerable bulk. To facilitate finding a particular entry within the year, this index identifies the issues in which entries appear. (focal)

P-07. New Projects. A periodic current listing of new projects in education. (focal)

P-08. Quick Available Document Service (QADS). Standard entries in any of the above categories take a specified and normal, minimum amount of time to enter the system after they have been originated in the field. To make it possible to obtain information from the system more quickly in special instances, this service enables such instances to be treated in advance of the strict rotation of processing designed to maximize the flow of volume information in the system. (focal)

P-09. Maintained Thesaurus. A continuously updated catalog of descriptors used for referencing. This catalog is stored in the computer, with hierarchical and other data to facilitate referencing between related descriptors. From the thesaurus data bank, camera-ready copy (P-25) is periodically prepared for publication. (focal, interviewed around)

P-10. Source Authority Directory. A list of the corporate authors (agencies for whom individual authors work, or by whom they are employed) of documents of various kinds with catalogued codes used within the system, to enable entries to be retrieved by source code. (focal, interviewed around)

P-11. Field Reader Catalog (FR). A current list of field readers, with data about their specialties, etc. (focal)

P-12. Log of Documents In. The initiation of the coding of new entries to the system, where documents receive the serial numbering by which they are identified throughout their movement through the process. (facilitating product)

P-13. Handout Materials. Promotional or informational items to provide users or potential users of ERIC with guidance about how to seek information they may need. (facilitating)

P-14. Form Letters. Designed to facilitate answering some 90% of the correspondence inquiries received. (facilitating)

P-15. Responses to Reference Queries. Queries are received by letter and by telephone. Appropriate responses are made to the inquirer's questions. (facilitating, interviewed around)

P-16. Computer Program Documentation. An updated, how-to-use document for the program. (facilitating, interviewed around)

P-19. Master Schedule for RIE. A time chart for project operation, marked off by days. It lists activities specifically connected with the production of RIE (P-02), as activities related to other outputs take their timing from the progress of this product by successive monthly issues. A former version of this product attempted to list activities related to all outputs, but it was too complex for easy reading and thus discouraged its adequate use. (facilitating, interviewed around)

P-21. Forms. Designed or redesigned as required. As such forms are the primary vehicle for carrying data for entry into the computer, and thus facilitate interface with the computer, they perform an important function with the result that improved design can materially expedite and improve quality. (facilitating)

P-22. Unit Cost Report. A tool used by management for determining unit cost within each product activity of the project. (facilitating, interviewed around)

P-24. Edited Abstracts. Reduced to the form used for storage in the system. (component product, interviewed around)

P-25. Camera-ready Copy of Thesaurus. An up-to-date readout of thesaurus content made ready for publication. (component product)

P-26. Magnetic Tape of Various Categories of Data. The library of computer tapes with data of various categories stored for retrieval as required. (focal)

P-27. Publications (Printed, Collated, Bound). A collection of outputs (represented in Outputs P-01 through P-07 and P-11) after the copy has been processed by the various other agencies involved and circulated. (focal)

P-28. *Statistical and Reference Reports*. A series of analytical outputs with various uses across the project. (facilitating)

P-29. *Computer Operating Manual*. An updated instruction manual for operating the computer. (facilitating)

P-30. *ERIC Operating Manual*. An updated instruction manual for each of the procedures involved in the processes for developing each product of the system. (facilitating)

P-31. *Quarterly Progress Report*. A quarterly summary of ERIC production, with particular emphasis on progress. (facilitating)

P-32. *Expenditure Report*. A complete breakdown of expenditure. (facilitating)

P-33. *Exception Report*. Report detailing deviation from plan. (facilitating)

P-34. *Weekly Activity Report*. Weekly record of document flow between clearinghouses and the facility, and of processing in progress during the week. (facilitating)

P-35. *Linotron Content Proof*. A master form of readout produced by linotron in form for use as publication copy. (component)

P-36. *Documents with ED Numbers*. The ED number is the ERIC accession number, sequentially assigned to documents as they enter for processing, and by which they are subsequently identified. (component)

P-37. *Resumes with ED Numbers*. Corresponding resumes with ED numbers to identify the document to which they refer. (component)

P-38. *Descriptor Usage Report*. Descriptors are the terms contained as entries in the thesaurus and used as means of entry to stored data related to documents for which they have been used as descriptors. A usage report indicates how many times each descriptor is used relative to individual documents whose data is stored in the system. (facilitating)

P-39. *Identifier Usage Report*. Identifiers serve a function in the system different from descriptors: descriptors relate to subject-matter content, while identifiers enable different items of identical content (as identified by descriptor designation) to be distinguished, one from another. This report shows how many times each identifier in the system is used. (facilitating)

P-40. *Cumulative Bureau and Report Number Indexes*. In the course of processing, because of the size of the system, each document will acquire different serial numbers to serve different identification purposes. These indexes provide ready reference to obtain interrelationship between these numbers. (component)

P-41. Cumulative Cross-references Report. Cross-references are another useful means of locating documents where the descriptor may not be directly successful. This is a report of cross-reference usage within the system, and can serve a purpose similar to P-38 and P-39, for their respective purposes, one of which is an examination of the utility of descriptors, identifiers, and cross-references in use. Some may get a great many uses, indicating justification of their use as points of entry, others may only be used once, indicating them as candidates for deletion as probably redundant. (facilitating)

P-43. Acquisition Data Listing. A listing of data items acquired in each category. (component)

P-44. ERIC Facility Acquisition Report. A report of the acquisition by the ERIC facility. (component)

P-45. Lexicographic Analysis. An analysis of thesaurus content by the various categories distinguishing descriptors. (facilitating)

P-46. Computer-stored Data. The total data content of the computer in all categories. It is ongoing and cumulative. (focal)

P-47. Microform Outputs. An alternative medium to the hard-copy (printed page) format in which items abstracted in the publications can be ordered. (focal)

Events. The following ongoing processes update the means by which products get produced.

E-17. System Design Changes. These are made as the need or advisability arises, with attention always to optimizing the overall operation. (facilitating, interviewed around)

E-18. Problem Solving. Essentially a procedure for working out errors in processing, usually initiated because a computer run fails to complete successfully. (facilitating, interviewed around)

Conditions. The following outputs of effort on the project are regarded as providing conditions to enhance quality product output.

C-20. Quality Control. Various procedures, linking events, and products designed to assure continued and improved quality, both as to accuracy and to time and cost-effectiveness. (facilitating, interviewed around)

C-23. Staff Morale. Means whereby staff pride in the output of the facility is maintained. (facilitating, interviewed around)

Chapter III: Summary of the Data

Much of the work within any part of the ERIC system will be routine to insure that the information stored is accurate and retrievable. But retrievability means different things to different people. What makes an information system readily accepted by the user is not whether the information he seeks is "in there," so much as whether he can "get it out" in a manner that meets his needs.

So the objective in examining the activities at this facility was not so much to report on how an information system works in all its details, as it was to address those activities and subproducts whose object is to make the system serve its users more effectively.

The tables included in this chapter each summarize a category of data obtained in relation to the various outputs identified for the ERIC Project. The column labeled "Project Output" identifies the outputs of the project which are appropriate to that table. (Only those outputs for which data were obtained are included in a table. Consequently, the list will vary with each table.) The numbers accompanying each output (e.g., P-01) are identifiers which are constant throughout this profile, and can be used in referring to the raw data statements relating to that output. (These statements appear in the Appendix.)

The categories of data shown in the tables are the standards by which the satisfactory completion of the output is judged, the tasks required to generate an output meeting those standards, and the enablers (knowledges, skills, sensitivities) which facilitate the carrying out of those tasks. Within each of these categories is found a list of descriptive labels which are representative of interviewee statements (raw data). In the process of reducing raw data, narrative interviewee statements were first linked to one of the above categories, then classified by means of a number code under the most representative descriptive label. Each table provides the frequency with which interviewees cited specific statements (represented by the descriptive labels) of each category.[1]

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[1] If the reader is interested in the narrative statements of the interviewees (raw data), these can be found in the Appendix. To locate the narrative statement for any given category, first note the output and its identification number in the table. Second, note that each descriptive label within a given category has a distinct number or code. Turn to the Appendix and locate the output. Under the output locate the category lable or heading (standard, task, or enabler) and pinpoint the number or numbers (depending on frequency cited) of the descriptive label which appeared in the table. The statement in the Appendix opposite this number is the original narrative statement from an interviewee and is only represented in the table by the descriptive label and its number coding.

The results of the interviewing are summarized in the six tables which follow. The first two concern standards by which interviewees assess the outputs of the tasks they perform. Standards are linked to the outputs to which they relate, which are divided into three categories: products, events, and conditions.

On this project, the majority of outputs are products of a tangible, identifiable form, the number of these on the output map and in the tables is prefixed with a "P." Two events and two conditions were identified, for which the prefixed "E" and "C" are used. Standards are divided into two categories: those that relate to the output itself, and those that relate to process/operations.

Table 2 relates classes of output standards to the outputs listed. As with all these tabulated results, the precise words (or meaningful paraphrases thereof) used by interviewees are contained in the appendix. The category headings used in the tables are common across this and other projects visited, although only those encountered on this project are given columns in the table.

Note that the highest number of output standards occurs in the category, Lack of Errors/Discrepancies. This reflects the project concern for accuracy. This is confirmed by the fact that the greatest number of output standards is found relative to C-20, Quality Control. The other standards relating to quality control are under the category headings of Goal Attainment and Lack of Negative Feedback.

In Table 3, which tabulates process standards, there is no particular concentration by category of standards, but there is by the condition of staff morale (C-23). The categories checked as standards that reflect staff morale are Personnel are Satisfied, Acceptable Level of Output, Values and Objectives Match, and Impact of Effort Favorable.

Table 4 shows the categorization of all the tasks (136 in number) described by interviewees. The prevailing categories mentioned reflect the emphasis on producing the output with secondary emphases on clarifying problem addressed and on effecting quality control. It should again be emphasized that these frequency counts reflect the objectives of the examination, rather than the overall emphasis of activity in the facility.

Note the weight of response concerning the maintained thesaurus on clarifying problems addressed (one-third of the tasks within this category), which reflects the nature of this activity as one basic to the whole facility.

Tables 5 through 7 tabulate knowledges, skills, and sensitivities identified by interviewees as necessary in the performance of tasks connected with producing the outputs about which they were interviewed. In the knowledge group (Table 5) the concentration appears in the categories Technical/Professional Topics, and Use of Equipment/Systems, reflecting the specialized nature of the work in the facility. The supporting knowledges confirm this, Project Operation (both general and specific) and Process Implementation (proj).

TABLE 2

Output Standards Cited for Each Output Analyzed

Project Outputs		Primary Categories of Standards for Outputs (Category code no. and label for coding set J-1)													
No.	Label	01 Completeness or content	02 Quantity of outputs/data	04 Communication and clarity	05 Utility or value	06 Acceptance by users	07 Personal satisfaction/feeling	09 Lack of errors/discrepancies	12 Goal attainment	14 Acceptance by sponsor	15 Compliance w/sponsor guidelines	16 Compares favorably	22 Functions as planned	30 Lack of negative feedback	Output Totals
P-02	Research In Education (RIE)						2	1		1					4
P-10	Source Authority Directory							1							1
P-15	Responses to Reference Queries		1												1
P-16	Computer Program Documentation	1		1	1										3
E-17	System Design Changes					1								1	2
E-18	Problem Solving												1		1
P-19	Master Schedule for RIE				1					1			1		3
C-20	Quality Control							3	1					2	6
P-22	Unit Cost Report	1										1			2
P-24	Edited Abstracts								2		2				4
Category Totals		2	1	1	2	1	2	5	3	2	2	1	2	3	27

TABLE 3

Process Standards Cited for Each Output Analyzed

Project Outputs		Primary Categories of Standards for Processes (Category code no. and label for coding set J-2)										
No.	Label	02 Personnel are satisfied	04 Deadlines are met	05 Acceptable level of output	11 Costs consistent w/estimate	17 External enthusiasm evident	22 Feedback occurs	26 Values and objectives match	34 Impact of effort favorable	35 Outputs distributed/ requested	41 Guidelines are followed	Output Totals
P-02	Research in Education (RIE)						1			1		2
P-09	Maintained Thesaurus								1		1	2
P-15	Responses to Reference Queries				1							1
E-18	Problem Solving			1								1
P-19	Master Schedule for RIE		2									2
C-20	Quality Control					1						1
P-22	Unit Cost Report					1						1
C-23	Staff Morale	1		1				1	1			4
P-24	Edited Abstracts										1	1
Category Totals		1	2	2	1	2	1	1	2	1	2	15

TABLE 4

Tasks Cited for Each Output Analyzed

Project Outputs No.	Label	01 Clarifying problem addressed	02 Formulating objectives	03 Designing the output	04 Producing the output	05 Collecting/Processing Data	06 Assessing the output quality	07 Diffusing the output	21 Procuring professional staff	22 Effecting accountability	24 Effecting quality control	25 Maintaining job satisfaction	27 Enhancing physical environment	29 Facilitating relationships	30 Effecting info flow patterns	31 Diffusing info within project	32 Diffusing info beyond project	33 Effecting decision mechanisms	Output Totals
P-02	Research in Education (RIE)	2			7	1	5				2			1					18
P-09	Maintained Thesaurus	8			3	4	1				5	1				1			23
P-10	Source Authority Directory				2	1	2				2								7
P-15	Responses to Reference Queries	3		1	3		1			2					1	3	2		16
P-16	Computer Program Documentation				2		1	2			2			1				1	9
E-17	System Design Changes		1	1	1	1												1	5
E-18	Problem Solving	3		3		1					1					2			10
P-19	Master Schedule for RIE	1			2		1	1		2	1			1					9
C-20	Quality Control										3			1					4
P-22	Unit Cost Report			1	1	1		1		4				1					9
C-23	Staff Morale								1	2		3	2			2			10
P-24	Edited Abstracts	1			4	3	2				3					1	1	1	16
Cluster Totals		18	1	6	25	12	13	4	1	10	19	4	2	5	1	9	3	3	136

TABLE 5

Enabling Knowledges Cited for Each Output Analyzed

Project Outputs No.	Label	Primary Categories of Enabling Knowledges (Category code no. and label for coding set S-1) 04 Technical/professional topics	07 Project operation: general	08 Project operation: specific	09 Scheduling and Organizing	10 Staff status/responsibilities	16 Guidelines for reporting	19 Technical terminology/language	22 Use of equipment/status	24 Process implementation (proj)	29 Need for materials/info	Output Totals
P-02	Research in Education (RIE)			2					1	3		6
P-09	Maintained Thesaurus									1		1
P-15	Responses to Reference Queries									1	1	2
P-16	Computer Program Documentation						1		1			2
E-17	System Design Changes	3	1	1		1			1			7
E-18	Problem Solving		1					1	2			4
P-19	Master Schedule for RIE	2	2		2				1			7
P-22	Unit Cost Report	2										2
P-24	Edited Abstracts			1								1
Category Totals		7	4	4	2	1	1	1	6	5	1	32

TABLE 6

Enabling Skills Cited for Each Output Analyzed

Project Outputs		Primary Categories of Enabling Skills (Category code no. and label for coding set S-2)													
No.	Label	02 Facilitating people interact	05 Programming project events	11 Disciplining self	14 Writing	17 Interpreting language	18 Finding fits/integrating	20 Exercising judgment	21 Tracking activities/goals	31 Taking another's perspective	35 Communicating clearly	38 Using resources effectively	44 Fiscal accounting	46 Placing others at ease	Output Totals
P-02	Research in Education (RIE)			1			1								2
P-09	Maintained Thesaurus	1													1
P-16	Computer Program Documentation									1					1
E-17	System Design Changes	1			1						1			1	4
E-18	Problem Solving					1									1
P-19	Master Schedule for RIE		1					1				1	1		4
P-20	Quality Control							1	1						2
Category Totals		2	1	1	1	1	1	2	1	1	1	1	1	1	15

TABLE 7

Enabling Sensitivities Cited for Each Output Analyzed

Project Outputs No.	Label	02 Capabilities and limitations	03 Needs of self and others	06 Worth in disciplines/methods	10 Awareness of structure	13 Language barriers	21 Limitations of analyses/data	22 Responses of target audiences	24 Sources of error	30 Response sets of target audiences	31 Nature/scope of outputs	33 Need for excellence in work	47 Willingness to work as needed	Output Totals
		Primary Categories of Enabling Sensitivites (Category code no. and label for coding set S-3)												
P-02	Research in Education (RIE)									1		1		2
P-09	Maintained Thesaurus						1							1
P-16	Computer Program Documentation					1								1
E-17	System Design Changes	1		1				1						3
E-18	Problem Solving								1					1
C-20	Quality Control											1	1	2
P-22	Unit Cost Product		1											1
C-23	Staff Morale		1											1
P-24	Edited Abstracts				1						1			2
Category Totals		1	2	1	1	1	1	1	1	1	1	2	1	14

The heavy concentration of responses about knowledge required related to system design changes and the master schedule, with a close follow-up on the major monthly product, P-02, Research in Education.

In the skill department (Table 6), also, the areas where most response was received were relative to system design changes and master schedule for RIE. Skills showed no heavy concentration by category, indicating that the activities in this facility call for a broad range of skills.

Sensitivities (Table 7) had a slightly smaller number of responses than skills. Possibly the significant aspect emerging from the three tables (5 through 7) on this project is a much higher concentration of responses in the knowledge group, as compared with skills and sensitivities.

Supporting and Technological Services

Computer terminals and reprographic support services are maintained within the same building as that housing the ERIC facility itself.

Physical/Environmental Setting

Its location in Bethesda, Maryland, which is in the greater Washington area, makes this ERIC facility convenient to a variety of central educational offices, including USOE and Central ERIC.

The emphasis in this project is on work flow, and much of it could be broadly categorized as falling within a writing or editing class, although the kind of writing and editing performed within this facility differs from that encountered in the average publishing house.

The office arrangement provides each staff member with a private operating space, but the spaces are connected for easy access to facilitate work flow. One example of this is that the lexicographer has two adjoining desks to facilitate the separation of two sets of tasks to be performed: those relating to the thesaurus and those relating to the source authority directory.

Chapter IV: Supplementary Data

This chapter contains information about staff background, the support services used in carrying out project tasks, and the classification of outputs.

Summary of Staff Background

Of the six staff members interviewed, four had master's degrees and two had bachelor's. For four of them the area of specialty for the highest degree was in library science, the other two had one in English/writing and one in business administration. Minor areas of specialty among the same six staff members included one in education, two in psychology, two in English/writing and one in speech.

Regarding other experience, three of the six interviewed listed an aggregate of nine years experience working in public schools. Three listed an aggregate of 15 years working in other educational or research employment. The total time the six people indicated as having worked in the present organization was 25 years. Among three of the six, there was an aggregate of over 10 years directing educational R, D, D, or E projects.

Three of the interviewees, in their responses, suggested that for their jobs they needed not less than five years experience in educational RDD&E administration and management. Other respondents listed from one to three years in answer to the same question (but of course they were referring to different jobs).

Summary of Support Services

The support services listed as used by the six persons interviewed included: printing, other production services, photography, artwork and illustration, technical writing, editing, secretarial service (other than typing), typing, purchase of supplies and equipment, library holdings, subscriptions to technical and professional journals/periodicals, request for documents or publications not locally available, computer analysis services (data processing), computer program writing, audio-visual aids and services, travel arrangements, and budgetary and other fiscal accounting.

Under the heading of support equipment, the same six interviewees listed: desk calculators, remote computer terminal, key-punch machine, data-card sorter, photographic equipment, readers for microfiche or microfilm, and typewriters.

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Classifications of Output Characteristics

Outputs may be categorized in terms of a number of variables. Among them are (a) Structure (product, event, or condition), (b) Function (policy setting, management, or production), (c) Level (focal, component, or facilitating), (d) Character (knowledge, technology, implementation, or information), and (e) Stage of completion. These five schema are represented in Table 8 for each project output identified, with frequencies summarized for each category.

TABLE 8

Classifications of Output Characteristics

Project Outputs		Output Characteristic[a]																		
		Structure			Function			Level			Character (Products only)				Completion Stage					
No.	Label	p	e	c	ps	m	p	f_1	c	f_2	k	t	i_1	i_2	1	2	3	4	5	6
P-01	Current Index to Journals in Education (CIJE)	X					X	X				X								X
*P-02	Research In Education (RIE)	X					X	X						X						X
P-03	Current Project Information (CPI)	X					X	X						X						X
P-04	Manpower Research	X					X	X						X						X
P-05	Pacesetters in Innovation	X					X	X						X						X
P-06	RIE Cumulative Index	X					X	X				X								X
P-07	New Projects	X					X	X						X						X
P-08	Quick Availability Document Service (QADS)	X					X	X				X								X
*P-09	Maintained Thesaurus	X					X	X				X								X
*P-10	Source Authority Directory	X					X	X				X								X
P-11	Field Reader Catalog (FR)	X					X	X				X								X
P-12	Log of Documents In	X				X				X				X						X
P-13	Handout Materials	X				X				X			X							X
P-14	Form Letters	X				X				X			X			X				
*P-15	Responses to Reference Queries (Letter and Telephone)	X				X				X			X							X
*P-16	Computer Program Documentation	X				X				X		X								X
*E-17	System Design Changes		X			X				X										X
*E-18	Problem Solving		X			X				X										X
*P-19	Master Schedule for RIE	X				X				X		X				X				
*C-20	Quality Control			X		X				X										X
-21	Forms	X					X			X		X								X
*P-22	Unit Cost Report	X				X				X				X						X
*C-23	Staff Moral			X		X				X										X
*P-24	Edited Abstracts	X					X		X					X						X
P-25	Camera-ready Copy of Thesaurus	X					X		X			X								X
P-26	Magnetic tape of various categories of data	X					X	X						X						X
P-27	Publications (Printed, collated, bound)	X					X	X					X							X

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TABLE 8 CONCLUDED

Classifications of Output Characteristics

Project Outputs		Output Characteristic[a]																			
		Structure			Function			Level			Character (Products only)				Completion Stage						
No.	Label	p	e	c	ps	m	p	f_1	c	f_2	k	t	i_1	i_2	1	2	3	4	5	6
P-28	Statistical and Reference Reports	X				X				X				X						X
P-29	Computer Operating Manual	X				X				X		X			X					
P-30	ERIC Operating Manual	X			X					X		X			X					
P-31	Quarterly Progress Report	X				X				X				X						X
P-32	Expenditure Report	X				X				X				X						X
P-33	Exception Report	X				X				X				X						X
P-34	Weekly Activity Report	X				X				X				X						X
P-35	Linotron Content Proof	X					X		X			X								X
P-36	Documents with ED numbers	X					X		X			X								X
P-37	Resumes with ED numbers	X					X		X			X								X
P-38	Descriptor Usage Report	X				X				X				X						X
P-39	Identifier Usage Report	X				X				X				X						X
P-40	Cumulative Bureau and Report Number Indexes	X					X		X					X						X
P-41	Cumulative Cross Reference Report	X				X				X				X						X
P-42	ED #/EP # Range for RIE	X				X			X					X						X
P-43	Acquisition Data Listing	X					X		X					X						X
P-44	ERIC Facility Acquisition Report	X					X		X					X						X
P-45	Lexicographic Analysis	X				X				X				X						X
P-46	Computer-stored data	X					X	X						X						X
P-47	Microform Outputs	X					X	X					X							X
Classification Frequencies[b]		43	2	2	1	22	24	15	9	23	0	15	5	23	2	2	0	0	0	43

[a] The specific output characteristics are identified as follows:

Structure	Function	Level	Character	Completion Stage
p - product	ps - policy setting	f_1 - focal	k - knowledge	1 - completed over one year ago
e - event	m - management	c - component	t - technology	2 - completed 3 to 12 months ago
c - condition	p - production	f_2 - facilitating	i_1 - implementation	3 - completed within last 3 mos.
			i_2 - information	4 - currently in progress
				5 - not yet underway
				6 - on going (continuous)

[b] Data totals in this table may vary slightly from data in tables reported elsewhere. This is a function of decision rules governing classification of outputs having been revised and applied to these data subsequent to the preparation of the profile.

Chapter V: Dynamics of the Project

Focus of the Project

Considering either the entire ERIC system or this central facility, which plays a small but key role within the system, the focus is on diffusion, i.e., the facilitation of transfer of information about "what's going on" in education. Much of the information, from whatever source, qualifies in greater or lesser measure for being considered as educational RDD&E. Innovation and change are the common features either contained in or claimed by most documents that ERIC abstracts and reports, be they papers, theses, journal articles, proposals, or reports.

ERIC is a center, or a complex of centers, where the tremendous amount of information over the whole educational field is collected, stored, and made available as users want it. It is a very large information storage and retrieval system facilitating the desirable end of enabling people working within the field to keep themselves up to date with all that is going on relevant to their own activity.

This is a basically simple task whose magnitude proves to be monumental. It is in its own way intimately connected with the changes that educational RDD&E attempts to effect within the educational system. Viewed against the magnitude of the educational system itself, the changes being effected are few. The personnel and resources engaged in confronting the problems and attempting to solve them are likewise few when compared against the magnitude of personnel and resources engaged in the system itself.

But taking ERIC's view of these change efforts--the view that personnel working within ERIC are exposed to--the efforts are many and diverse; so much so as to "boggle the mind." The ERIC machine is a computer that receives a vast amount of information suitably coded so it can be retrieved in a variety of ways by those who have need of any specific item or segment of it. As such, the machine can only handle bits of information. To a machine, any set of information bits that is nonrepetitive of sets previously entered is new. The human users of the machine must assess to what degree the sense or content of those information bits conveys information, concepts, technology, and experience that is basically new.

To some extent, the document analysts' work within this project tends to become a human adjunct to the computer: to make sure that the information entered for storage is in its proper form and accurately reflects the documents thus entered for storage. This tendency is analogous to the work of a copy editor who reads manuscripts to see that the spelling, grammar, and punctuation are correct, while paying either little or no attention to the content of what is being conveyed.

Such a skill is not to be deprecated. However, these people are much more involved than merely fulfilling this function would have them. Reading all these documents impresses them with the vast scope and value of the enormous amount of information represented in the material they handle. They probably would not be working in the facility if they did not already possess a deep concern for education. This means that by reading this vast amount of material in the course of processing it, as well as performing the function just described of insuring that computer entries are accurate and meaningful, they become highly knowledgeable about what really is going on, and to some extent "where the action is."

All the publications and documents whose content is entered into the system are communicators whose purpose is to facilitate various segments of the population of workers in the field, keeping abreast of what the rest of the field is doing relevant to their own activity. With several hundred regular (mostly monthly) periodicals, as well as the ever-increasing quantity of projects and their reports, ERIC serves the useful function of enabling these workers to pinpoint items of focal interest to any individual.

Because advance in the "state of the art" is rapid, time is of the essence. The mass of literature, and the variety of its potential contribution to advancement, means that optimum use of work being achieved on many fronts can be achieved only by diffusing the results and information published as rapidly as possible. This is why the emphasis in the facility is on accuracy of data, particularly of abstracting, and speed of transfer from receipt of the documents to diffusion of information about them.

Content of the Project

In order to generate cost-effectiveness in this system the project has applied some methods that have proved to be effective in other applications and that have previously been tested in a similar information system. In this context, cost-effectiveness is closely tied to efficiency in achieving transfer within a minimum time.

The earliest attempt at time scheduling was to get the various product outputs on a specified time schedule utilizing a detailed master schedule that covered operational steps for every periodical publication. One shortcoming of this schedule was that the staff tended not to refer to it because of its being too detailed for easy reading.

The biggest single production item on the monthly schedule is Research in Education. Publishing this monthly document necessitates an overlapping schedule (see Figure 5), because the complete production of each issue from receipt of raw documents to production of the printed copy by the Government Printing Office occupies considerably more than a month.

By making a clear presentation of this RIE schedule, all the smaller products can fall into regular places without having to be specifically scheduled on a master plan. This provides, then, a framework for production and for progressive tightening of the production schedule. Staying on schedule makes production much easier and more efficient than struggling to "get out from under."

The team at this facility is concerned with improving the service rendered by ERIC in every way possible. Shortening time delays is one step. Making the information more meaningful and more easily accessible are other ways. Another is the initiation of the Quick Availability Document Service so that documents wanted sooner than the regular publication schedule permits can be obtained more rapidly. A further step presently envisioned and receiving consideration is the possibility of making the entries more meaningful in aiding users to make qualitative judgments about documents as to their significance relative to the specific purpose in the individual user's mind.

The unit cost report provides a basis for monitoring the effort put into each unit of output from the facility, thus enabling efficiency to be closely watched,and inefficient parts of the process to be studied more closely so that overall efficiency can be improved. This unit cost report was the result of 20 years of experience elsewhere. It was a new idea in the ERIC setting, however, and as such needed some justification as being worthwhile: its advantage on an automobile production line is obvious, but can it be equally useful in a multiple-output information system? The results have proven that the answer to this question is affirmative.

A major problem in utilizing the system consists in knowing how to look for what you want. The word that comes to the user's mind as describing the subject about which he wishes information may not be the one used as a descriptor in the system for that subject. Where a document covers subject areas represented by several descriptors, each will be given as reference by which that document may be identified and retrieved. But if one of those descriptors uses a word different from the one that represents the same subject area in the user's mind, here is an obstacle to retrieval for that user.

The general device that proves useful in overcoming this kind of problem is cross-referencing, in a variety of forms. Descriptors are thesaurus entries, having corresponding codes for computer use. For example, documents may also use identifiers to distinguish specific projects or programs by name or origin. Identifiers also provide a means for accessing data, although they are not entered in the thesaurus.

Descriptors listed in the thesaurus have a statement that serves the same function as a definition does in a dictionary. These are called "UF's" which stands for "used for." Where a UF entry consists of a single word or synonym for the descriptor this is also useful as a cross-reference word to aid in finding the descriptor. If the user looks for the word given as a synonym in the UF space for the correct descriptor, he will find that word with a reference "see. . ." identifying the descriptor where this subject will be found.

Another property of descriptors is that they fall into hierarchies. There are broader terms and narrower terms. Many descriptors contain two words (sometimes more). For example, a broad term might be "teaching," against which there might be narrower terms, such as "team teaching," "student teaching," etc. Against the descriptor "teaching" would be listed the set of narrower terms (NT) under which some aspects of the subject might be found. Against "team teaching," for example, would be found a broader term (BT), "teaching." Some terms that occupy a middle position in a hierarchy of terms may have both a BT and some NT's listed.

These are aids to finding other descriptors that may be helpful in locating the precise form of information a user is seeking. Another entry against a descriptor is a "related term" (RT). This enables the user to check another term with related but different significance that may not be hierarchically related to the term against which it is referenced.

Most everyone working at the facility has acquired over time some familiarity with the terms in the thesaurus. Having acquired that familiarity, the kind of help that a beginning person might need in finding the terms used, as opposed to those he might expect to find, is no longer necessary. So perhaps the change of a staff member in the position of lexicographer, not too long before our visit, was fortunate in sensitizing the lexicographer to the needs of people unfamiliar with the thesaurus content.

The lexicographer has had the computer produce a hierarchical read-out of terms, which is simply a listing of terms in alphabetical order of those that have no BT entry. Any term that has one or more NT entries has those entries placed under it, with an indent to indicate its hierarchical order. If the NT entries have further NT entries of their own, these are listed with a further indent, so a complete hierarchical display of terms is generated. The lexicographer has found this listing quite helpful for personal use in locating the most relevant terms and their interrelationships. At the time of our visit such a display had not been published, but it was being considered as an additional feature that might be helpful to users.

Another useful form of list, to aid in finding descriptors, includes every word found in each descriptor alphabetically arranged in the form illustrated below:

```
        teacher education
 master teacher
student teaching
   team teaching
        teaching method
```

The words listed alphabetically have their initial letters in a single vertical column, with the other words of the descriptor placed before or after exactly as they appear in the descriptor. This is another locating aid that may be published.

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The Project Director sees two personal attributes of his own as essential to the success of the project and in some measure these same attributes are essential at every level of the work. These are: (a) a perfectionist attitude--impatience with sloppy work, and (b) a determination to keep the generation of mistakes to an absolute economic minimum, recognizing that achieving such a goal entails nothing but hard, disciplined work.

Staff who can achieve such an ideal must be creative, dedicated individuals, who can apply themselves persistently to drudgery! Having a high degree of enthusiasm, based on a realization that what they are doing performs a vital function in the exciting things that are happening--and even more exciting things that efficient diffusion of this information can cause to happen in the future--largely dispels the sense of drudgery, as such, although the work remains very much a matter of routine.

Such is the atmosphere that pervades the project. It includes a pride in executing well this vital, titanic effort, by staying on top of the job. This is not to say that these people "have it easy." But keeping on schedule makes the toughest job seem easier than when it is pursued in an eternal struggle to catch up. This, along with the off the job social activity that the project encourages, promotes a healthy working relationship. These people are warm friends, as well as being hard co-workers.

Chapter VI: Training Implications

The work in this project may be divided into two general headings: that concerned with handling "raw" data--documents, abstracts, lexicography--and that concerned with handling data in a computer language.

Among the people whose work was in the latter group, the responses to questions about training implications were quite orthodox, i.e., specific courses in the kind of work they do: statistics, information theory, data processing, computer language, systems theory, and so forth.

Among the people whose work was in the former group, much greater prominence was given to "having a feel for" the work in one form or another, and to "learning on the job." A comment that perhaps falls somewhat between these two categories was that, "Management can only be learned by managing."

At the same time, in response to other questioning, each member of this group mentioned other experiences gained previously as helpful on this job, such as teaching or editorial work. There were a variety of work experiences mentioned in which the common factor seems to be learning about language usage (particularly English) in a practical work setting.

Appendix

Appendix: Listing of Output Standards, Tasks, and Enablers

The following is a list of standards, tasks, and enablers for outputs around which interviews were conducted. These statements were extracted from discussions with interviewees and were coded into their respective category sets. The selected code precedes the statement and indicates the following for:

STANDARDS

Code J: Structure of Standards.

J-1 Standards against which outputs are judged. (output oriented)

J-2 Standards against which processes and/or operations are judged. (process oriented)

Code LM: Primary Categories of Standards.

TASKS

Code NO: Clusters of Tasks.

ENABLERS

Code S: Structure of Enablers.

S-1 Knowledge.

S-2 Skill or ability to perform.

S-3 Sensitivity or awareness.

Code UV: Primary Categories of Enablers (knowledges, skills, or sensitivities).

The codes associated with these three categories (standards, tasks, enablers) are the same both here in the listing and as previously cited in Chapter III tables.

The words in the following listings are reasonably close to the words in which interviewees responded. For example, they have been translated into the present tense where the task may have been related in the past tense. Also, a specific term of reference may have been added so that a statement could stand on its own, in the case where the interviewee may have connected it to a previous statement.

P-02: Research in Education

STANDARDS:

J	LM	
1	07	Feel like I did a good job.
2	22	Feedback from others, expecially users.
2	35	Large and growing circulation.
1	07	Feel like it is a prestige product.
1	09	No errors found in final product.
1	14	Acceptance of product by USOE.

TASKS:

NO	
01	Review publications for items worthy of submission.
01	Read the item for abstraction.
04	Write an abstract of the item.
04	Fill in the appropriate resume, includes indexing, cataloguing, source codes, descriptors, identifiers, etc.
04	Send documents and resumes to ERIC facility weekly.
06	Check the resume against the document to see if all points are covered.
06	Correct any errors found in first check.
06	Review for controversial material.
29	Contact contributing clearinghouse to edit out controversial material from abstract.
06	Check for consistency, e.g., different forms of same name, punctuation, etc.
04	Forward resume to subcontractor to punch into paper tape.
05	Run paper tape into computer edit run--Line Image Data Set (LIDS).
06	Edit printout exhaustively for errors.
24	Run one or more (until clean) correction computer runs on LIDS.
04	Put the batches of runs together in the computer.
04	Put the information onto Linotron tape.
24	Check Linotron printout ("release audit").
04	Send the Linotron tape to the Gov't. Printing Office for printing and distribution.

ENABLERS:

S	UV	
3	30	Sensitive to terms that a search person would be looking under to find such a document.

2	18	Skill in selecting main ideas--those which are important to potential users, mainly educators.
1	22	Know what computer will accept, from training and documentation.
1	08	Knowledge of program input/output documentation.
1	24	Knowledge about how to make connections with a minimum amount of effort.
1	24	Familiar with the ERIC Operating Manual and documentation of the system.
1	24	Knowledge about source codes--feel for codes, formats, etc.
1	08	Familiar with the thesaurus.
2	11	Patience.
3	33	Sensitivity to quality of work coming from clearinghouse.

P-09: Maintained Thesaurus

STANDARDS:

J	LM	
2	34	Have very nice working relationship with clearinghouse.
2	41	PET (Panel of Educational Technology) rules followed.

TASKS:

NO	
05	Terms are entered on DJF (Descriptor Justification Forms).
01	Search existing thesaurus file (a printout which is an updated version, current as of specific issue of RIE; this is a master file for ERIC system) to make sure term is not in there already.
01	Search for near synonyms for term.
24	Make sure term is not already being processed on application from another clearinghouse.
06	Work the SN (scope note) over to reduce to the shortest form (contextual scope of the term).
01	Look at BT (broader terms) and NT (narrower terms) submitted on DJF in file.
01	Look at RT (related terms) in file.
24	Work with problem that clearinghouses do not have the same concept of generic structuring, which for us is a matter of class membership. They look at it from own subject point of view.

24	Write or call (more often call) clearinghouse to clarify problem.
25	Arbitrate until agreement is reached.
31	If agreement cannot be reached with clearinghouse take it to central lexicographer at USOE.
24	Check definition of terms submitted.
01	Check authorities listed, establishing definition and usage, including documents already in the system, in which term would have been used if available.
01	If necessary, pull the microfiche of an identified document and read it for usage of term.
05	Approved DJF's are entered in LIDS.
05	Right before RIE Journal is published, edited LIDS are released into MDS.
24	Check UF entries in printed thesaurus (UF's are not in file).
05	Terms entered in LIDS are checked for correct printing by computer, preparatory for entry into MDS.
04	Use DJF for internal facility changes: addition, deletion, change of entries; purge of entry; removal of LIDS.
04	Use hierarchical display where BT and NT listings in thesaurus master file are too restrictive of total view (Hierarchical Display not yet published, but scheduled to be.)
01	Refer to [illegible] rules for thesaurus preparation, or entering terms not in thesaurus descriptor list. (Identifier can include acronyms.)
01	Refer to statistical report for usage of descriptors and identifiers.

ENABLERS:

S	UV	
1	24	Familiarity with various routines involved.
2	02	Rapport with people at clearinghouses for clarification of problems.
3	21	Sensitivity to probable permanence or transitoriness of real terms.

P-10: Source Authority File

STANDARDS:

J	LM	
1	09	Nonduplication of entries under different descriptors, so the same source always has the same numerical code.

TASKS:

NO	
24	Make sure that the source is not already entered, with a different variation of the name.
24	Constantly survey the directory to discover and eliminate duplications and redundancies.
04	List sources that are part of multilevel system by highest and lowest units.
04	List geographical location of the smallest element used for catalog.
05	Ask computer for all documents posted against source code number.
06	Remove source code against each resume involved.
06	Insert corrected source code against each resume involved.

ENABLERS: No information collected under this heading.

P-15: Reference Correspondence

STANDARDS:

J	LM	
2	11	About 98% of letters received can be handled with one of three form letters in use.
1	02	In 15 months, since this service started, from 200 letters a week to 300 letters a week.

TASKS:

NO	
04	Generate form letters to cover queries received.
06	If I get repeated special letters that are similar, I add to the form letter to cover this new need.
31	Receive about 300 letters a week from three sources: USOE; ERIC document reproduction service; direct from people (letter or phone).
01	On getting inquiry, first look at RIE Journal.

31	Some impossible letters, e.g., "Send me everything you have on individualized instruction." Send them general covering letter with appropriate pamphlet.
01	Do a subject search (ERIC has no title listing).
03	Identify problems created by various information mismatches (e.g., inquiry about report by title of proposal initiating project, when they may differ).
01	Consider ways to approach making the needed linkage.
22	Maintain collection of individual clearinghouse materials in "tins."
22	Maintain a library of reference materials needed by various staff members.
30	Run own dissemination program among staff.
04	Use printout of project directors to help locate title change problems.
31	Refer questions, such as copyright, to appropriate person.
04	Use identifier index to find something vague, e.g., "in California."
32	Supply people, particularly in other countries, with information about the ERIC system.
32	Produce pamphlets and include in package.

ENABLERS:

S	UV	
1	24	Knowledge of what's going on.
1	29	Knowledge of material in demand.

P-16: Computer Program Documentation

STANDARDS:

J	LM	
1	01	Documentation is as complete as possible.
1	04	Documentation is clear and simple so someone else can understand it.
1	05	Documentation will still be understandable a year from now.

TASKS:

NO	
04	Document existing programs according to USOE specifications.

06	Correct existing documentation as changes are made.
04	Write draft of documentation for new program according to USOE specifications.
24	Check, verify, sign documentation by programmers.
24	Check, verify, sign documentation after head of data processing does so.
29	Confer with writer on disagreements.
33	Decide on final version of documentation.
07	Send documentation to personnel affected by program, such as the editors, if necessary.
07	Send a copy of documentation to project monitors in USOE.

ENABLERS:

S	UV	
1	22	Knowledge of the computer program.
1	16	Knowledge of the USOE format for documentation.
2	31	Able to divorce self from writing to assume position of someone who hasn't knowledge of the computer program.
3	13	Sensitive to target audience and their ability to understand.

E-17: System Design Changes

STANDARDS:

J	LM	
1	30	Comments from staff--not discouraged; no problems, no cause for more work.
1	06	Comments from those who get the computer outputs indicate outputs acceptable.

TASKS:

NO	
03	Write a plan for design study and change of computer system.
02	Talk to people to find out what changes would help them.
05	Perform systems analysis study of proposed system changes.
33	Make decision whether or not to go ahead (with system change) given the information from the system study.
04	Incorporate system changes decided upon.

ENABLERS:

S	UV	
1	04	Knowledge about photo composing systems.
1	04	Knowledge about systems design and systems analysis.
1	07	Knowledge about functioning of ERIC; of what information goes into it.
1	04	Experience in working with systems design and analysis.
1	08	Know what you want to do.
1	22	Know about programming ALC language.
1	10	Understand the job of the person one is interviewing.
2	46	Able to put people at ease regarding potential changes.
2	14	Writing skill.
2	35	Communication skill.
2	02	Psychology skill (in dealing with people).
3	02	Understand people.
3	22	Sensitive to people's reaction.
3	06	Sensitive to usefulness and simplicity rather than changes that just look good.

E-18: Problem Solving

STANDARDS:

J	LM	
1	22	The problem gets solved.
2	05	Publications, especially Research in Education, get out on time.

TASKS:

NO	
24	Operator terminates program run (in face of error).
01	Go to manual and look for the termination number and its message.
01	Look at the documentation for a possible solution.
01	Go to the actual code and source listings for possible solution.
03	Look at module names.
03	Get their address in relation to the module.
03	Locate start of module.
05	Perform systematic IBM debugging work with dumps in core to try and find possible solution.

31	Call in project director/systems programmer to help look for a possible solution.
31	Talk to outside people such as outside systems programmer or prime contractor if necessary to solve the problem.

ENABLERS:

S	UV	
1	07	Knowledge of the system (ERIC).
1	22	Knowledge of the operating system (IBM-S).
1	19	Knowledge of IBM's ALC language.
1	22	Knowledge of how to get in and look at the system.
2	17	Able to read dumps.
3	24	Sensitive to type of error and possible consequences.

P-19: Master Schedules for RIE

STANDARDS:

J	LM	
2	04	Able to meet the schedule on time.
2	04	Journals come out at a desirable time. (monthly)
1	14	The client is satisfied.
1	05	Schedule is readable and usable (and used).
1	22	Schedule does provide unification of the network by striving toward a common goal.

TASKS:

NO	
01	Read through details of the ERIC facility contract with assistant for contractual obligations.
04	Make a first draft of a schedule for RIE.
29	Sit down with USOE people and make any necessary changes.
04	Write a final schedule.
22	Send the schedule to the artist to have the art work done.
22	Send the final copy to the printing facility for reproduction.
07	Distribute copies to staff, USOE, clearinghouses, etc.

24	Improve the schedule for weekly instead of monthly shipments from clearinghouses.
06	Modify the schedule to two week printing time by Gov't Printing Office from three and one-half weeks.

ENABLERS:

S	UV	
1	07	Know the "givens" in the contract.
1	07	Know what management feels is reasonable to expect from people.
1	09	Experience in working with schedules on other jobs.
1	09	Know what kind of a schedule works and what kind doesn't.
1	22	Knowledge of information retrieval system.
1	04	Knowledge of library services.
1	04	Knowledge of computer services.
2	20	Judgment on how long the steps took based on three months operating experience.
2	38	Skill in management.
2	44	Skill in accounting.
2	05	Skill in scheduling.

C-20: Quality Control

STANDARDS:

J	LM	
1	30	No letters or calls of complaint from those who read the published documents, including clearinghouse, authors, subscribers, USOE.
2	17	Approval of thesaurus by commercial publisher prior to printing by Gov't. Printing Office.
1	09	No corrections to make in computer editing process.
1	09	No computer detected errors printed out.
1	30	No complaints in reference letters.
1	09	Personally not satisfied with sloppy work.
1	12	1% keying error acceptable.

TASKS:

NO	
24	Take corrective and prevention action when errors are found.

24	Inform staff of any errors to keep them on their toes.
29	Interact with subordinates to solve problems affecting quality.
24	Look over product for errors and approve.

ENABLERS:

S	UV	
2	20	Capable of making judgments of subjective quality, e.g., format, white space.
2	21	Able to see over-all picture of product quality.
3	33	Having a perfectionist mentality--can't take chances on error.
3	47	Willingness to accept drudgery of detailed work.

P-22: Unit Cost Report

STANDARDS:

J	LM	
1	01	Every dollar spent is included in the report.
2	17	The report has been accepted for presentation at a national conference.
1	16	Feel it is one of the better reports in the field.

TASKS:

NO	
03	Identify the products.
29	Interact with USOE monitors to modify report content found necessary.
22	Write down a list of charge numbers (which became the EDJE Facility Charge Number Guide) for each process in the system.
22	Keep a record of the time for the appropriate number on time cards.
22	Decide where charge numbers should be allocated (which products), e.g., director time spread equally across all staff members' work.
22	Fill cost figures into blank form.
04	Type up final copy.

07	Send copy to USOE monthly.
05	Perform an indepth analysis of costs.

ENABLERS:

S	UV	
1	04	Knowledge of accounting--how to handle and allocate costs, etc.
1	04	Experience in developing unit/cost reports over several years.
3	03	Sensitive to customers (USOE) need and wants.

C-23: Staff Morale

STANDARDS:

J	LM	
2	02	Personnel feel it is like home and someplace you like to work.
2	34	People talk about their jobs, and other things, in a positive way.
2	26	The behavior of individuals, such as hours they keep, being consistent with obligations.
2	05	Accuracy in work (is a reflection of good staff morale).

TASKS:

NO	
25	Deal with people as people and let them have freedom.
22	Give staff responsibility.
25	Hold a once a month birthday luncheon for those who had birthdays.
31	Hold staff meetings to keep them informed--as needed.
27	Put in a coffee machine.
27	Put in a refrigerator so they can leave lunch or buy vegetables at the corner stand.
25	Keep personnel in mind and give them a lot of benefits as long as they produce.
31	Keep staff informed of what's going on, especially if it affects them on their job.

22	Make assignments clear and in writing so as not to leave open to question.
21	Write job descriptions so staff know what expectations are and how they will be judged.

ENABLERS:

S	UV	
3	03	Sensitive to employees rights (a) to be treated fairly, and (b) to minimize uncertainty for them.

P-24: Edited Abstracts

STANDARDS:

J	LM	
1	15	Meets Editorial Guidelines (operating manual issued by USOE).
1	12	Abstracts are proportionate to content.
1	15	Content meets operating manual rules for inclusion and exclusion, correct abbreviation forms, etc.
1	12	Meets Abstracting Guidelines.
2	41	Thesaurus followed in determining descriptors and assigning weight to terms.

TASKS:

NO	
04	Abstract primarily items for CIJE (Current Index to Journals in Education) and RIE; secondarily, for Manpower, Field Reader and any publications currently active.
31	Receive entries, on appropriate forms, of relevant materials.
24	Check such entries for compliance with format, use of descriptors, accuracy.
06	Redesign forms for handling the data: deletion of unusued areas, eliminate irrelevant data. (Each publication has its own form.) Enlarge fields needing more space.
32	Retyped form; put in mailing to CCM (publishers for CIJE).
33	Decide whether annotation is necessary: does title tell it?
04	If title inadequate, prepare annotation: notation of content in standard format.

24	Refine statements of clearinghouse content responsibility.
04	If too long, edit author's abstract down to not more than 250 words.
04	If no author's abstract, prepare one.
05	Decide dominant group code, where item covers more than one. (Other may reference, but must be entered under only one.)
06	Update manual, in coordination with USOE, on basis of experience, finding better ways of doing.
05	Check entries on appropriate forms from other clearinghouses.
24	Check form of terms used that computer scans for.
01	To make abstract, read table of contents, summary, abstract, read through for main points. Scan through major areas, to make sure abstract is descriptive and informative.
05	Star descriptors representing major weight in item.

ENABLERS:

S	UV	
3	10	Sensitive to structure and usage of descriptors in thesaurus.
3	31	Sensitive to content of manual
1	08	Familiarity with thesaurus.

CASE PROFILE NO. 19

Written by

R. E. Myers
Gregory P. Thomas
Clark A. Smith

PROJECT TITLE: Children's Television Workshop

(CTW Project)

AN EDUCATIONAL DIFFUSION PROJECT CONCERNED WITH: Providing inner-city, disadvantaged preschool children with opportunities for intellectual growth and development of learning skills through a vigorous program of information dissemination and utilization.

A PROJECT OF: Children's Television Workshop Corporation
1865 Broadway
New York, New York 10023

This profile has been prepared according to

PROFILE FORMAT No. 2

Three profile formats are represented in this volume.
The reader should refer to this number when making
use of the reader's GUIDE to the profiles.

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Chapter I: Overview

This chapter contains a narrative introduction to the Children's Television Workshop Project, including the objectives, rationale, and significance of the Workshop and the context in which it operates.

Synopsis of the Project

Title: Children's Television Workshop.

Responsible Institution: Children's Television Workshop Corporation

Funding Source - General:
1. U.S. Office of Education.
2. Carnegie Corporation.
3. Ford Foundation (Education Department).
4. Public Broadcasting System.

Funding Source - Targeted:
1. Mobil Oil Corporation.
2. Xerox.
3. Neighborhood Youth Corps.
4. Southern New Jersy State Teachers College.

Funding Duration: April 1, 1968 - (ongoing)

Observation Date: February 1971.

Present Stage of Development: Third year of operation for the Workshop, second for "Sesame Street."

Focus of Project: Primarily diffusion, but research, development, and evaluation components are very strong.

Focal Products:
1. Television program "Sesame Street."
2. Television program - Reading.
3. "Sesame Street" magazines (Spanish and English).
4. Reading program magazine.
5. Parent/Teacher Guide to "Sesame Street."
6. Pop-up Books.
7. Sesame Street Newsletter.
8. "Scope" Newsletter.
9. ETS research publications
10. Educational greeting cards.
11. Paper puppets, calendar, story book, serialized books, comic strip, beginning readers, record albums, toys and games, film strips.

Level of Funding and Duration: High. (level 7 of 7 levels)

Agency Setting: Private, nonprofit corporation affiliated with the Public Broadcasting System and the National Education Television Corporation.

Staff Summary:

	Currently	Current Fiscal Year	Last Year	Anticipated Next Year
Professional	112	120	48	145
Clerical support staff	62	67	28	90
Technical support staff	6	6	7	10
Subcontractor professionals	9	9	5	9
Other significant personnel (consultants, advisors, etc.)	2	2	0	2

Objectives, Rationale, and Significance of the Project

The Children's Television Workshop (CTW) has been an organization dedicated to providing inner-city, disadvantaged preschool children with opportunities for intellectual growth and the development of learning skills. Created in March 1968, CTW took the position that the potenialities of the television medium had not been realized in this regard, and so they organized to produce television programming which would teach and entertain the nation's disadvantaged three-, four-, and five-year olds.

It was felt by the initiators of the proposal on which CTW based its initial efforts that preschool children of the United States were virtually forgotten from the standpoint of systematic attention to their intellectual growth. The original proposal, entitled "Television for Preschool Children," stated that "94% of the three-year olds do not attend any form of school." Of particular concern to CTW personnel was that portion of this population which was classified as "inner-city, disadvantaged." They believed that television programming designed to narrow the gap in academic achievement between disadvantaged and more advantaged children could be made available to this target group. The need for narrowing the gap was seen as critical to the future of the nation in light of demands for more sophisticated ways of thinking in an increasingly complex age.

CTW is presently extending and expanding the operations of its first two years. It is carrying out two coordinated phases of research and evaluation, concentrating particularly on gathering data as to the effects of its programming on the target audience of disadvantaged preschool children. The three areas of research and evaluation deal with (a) a program of formative research and curriculum development concerned with improving "Sesame Street," (b) a national program of summative evaluation conducted by an independent testing service to determine what has been accomplished, and (c) a study to determine the feasibility of the prospective televised reading program.

The original proposal carried CTW's activities to the present 1970-1971 television season, and encompassed a wide range of ground-laying activities which led to the current operations of the "Sesame Street" program. Since the operations of CTW are so expensive, particularly those relating to broadcasting, it is necessary for funds to be solicited from several agencies. It is also considered wise that the funding be distributed among several governmental and private sponsors so that one segment of society is not represented disproportionately over others.

Current funding of CTW is to accomplish five primary goals: (a) continue the broadcasting of the "Sesame Street" television program; (b) carry on extensive formative and summative research activities relating to the broadcasting; (c) establish an independent corporation; (d) allow CTW to engage in research, planning, and staffing activities leading to a second television program of reading instruction for seven- to ten-year olds; and (c) continue to pursue the goal of reaching the target audience of preschool children (especially the disadvantaged) through a vigorous program of information dissemination and utilization.

The research activities of this current funding period deal with formulating the curriculum for the second season of "Sesame Street" and for the reading program, developing instruments to determine if the objectives of the project are being met, preparing research reports and reviews, conducting formative field research and related activities, and conducting summative research and evaluation for this second "Sesame Street" season.

The significance of including CTW in the efforts for which this profile is a part has many facets. As a project, CTW has been classified as having a primary focus on diffusing material which has been shaped by research, development, and evaluation activities. Uniquely, CTW is the only project identified in the present study which has a single staff directed toward a common goal and which engages in public and systematic attention to all four of the foci under investigation, i.e., research, development, diffusion, and evaluation. (The implications of this feature are discussed in the section dealing with output data in Chapter III.) The rationale for the diffusion classification given this project rests on the observation that two of the five primary goals indicated for the current operation involve "broadcasting" and "reaching the target audience." While it is obvious that much research, development, and evaluation work must go on to accomplish this, salience of the programming remains a top criterion by which programming and educational effectiveness is judged. The production of nonbroadcast materials to extend both the salience and educational aspects of programming is in evidence. Finally, a full department devoted primarily to the distribution of nonbroadcast materials and the establishment of community operated viewing centers for inner-city children, not otherwise having access to television, fully justifies a diffusion classification for CTW.

It must be understood by the reader, however, that a primary classification of diffusion for CTW by no means minimizes the secondary classifications of research, development, and evaluation. In fact, in this project they may represent critical requisites to achieving a responsible end.

Context in Which CTW Operates

Relationships with other agencies. CTW's relationship with other agencies is described by the contextual map (Figure 1). During the first two years of its existence, CTW was a semiautonomous part of National Educational Television (NET); but with the funding of its second proposal it became an independent corporation. However, CTW is still affiliated with NET in its programming operations. The Public Broadcasting System (PBS) now has taken over the broadcasting operations of NET, and it is the agency with which CTW deals in actually putting "Sesame Street" on the Public Television Network. In addition, a great many commercial television stations are contracted to broadcast "Sesame Street" for a fee that varies with the size of the station and its audience.

In its comprehensive and extensive research program, CTW has contracted with a number of agencies to assist in evaluating the effects of

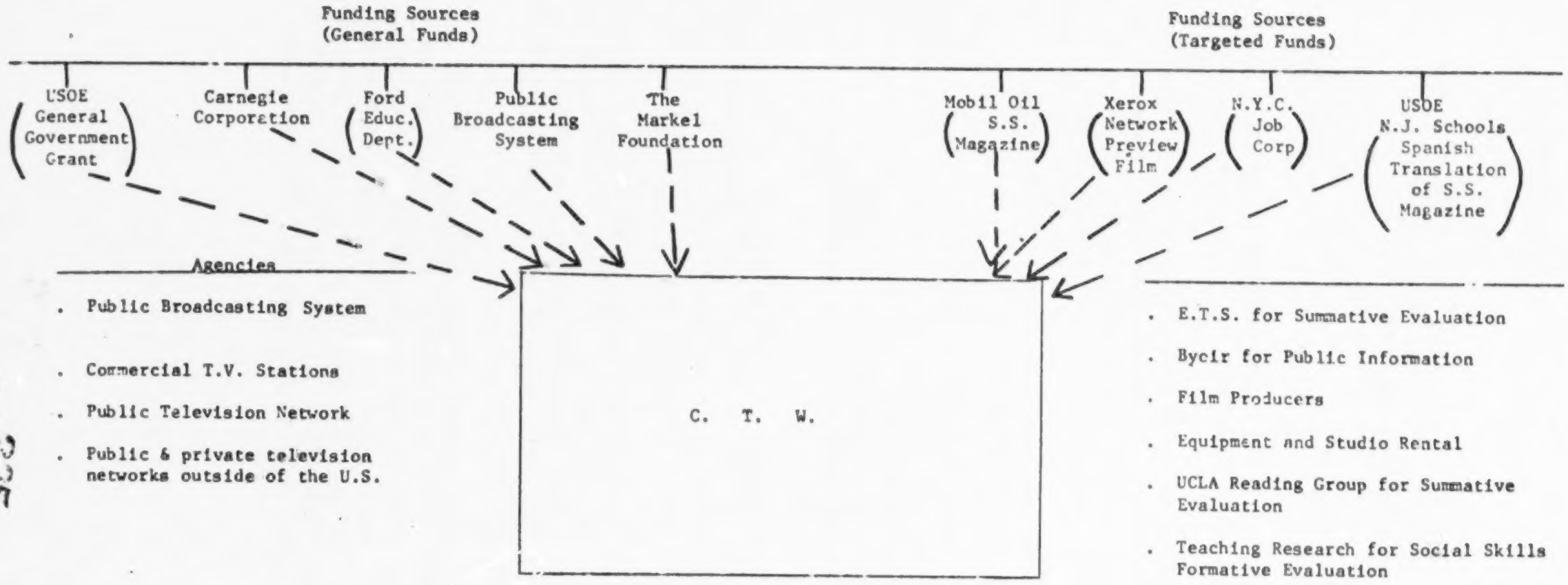

Funding Sources
(General Funds)
USOE General Government Grant
Carnegie Corporation
Ford Educ. Dept.
Public Broadcasting System
The Markel Foundation
Funding Sources
(Targeted Funds)
Mobil Oil S.S. Magazine
Xerox Network Preview Film
N.Y.C. Job Corp
USOE N.J. Schools Spanish Translation of S.S. Magazine
Agencies
. Public Broadcasting System
. Commercial T.V. Stations
. Public Television Network
. Public & private television networks outside of the U.S.
C. T. W.
. E.T.S. for Summative Evaluation
. Bycir for Public Information
. Film Producers
. Equipment and Studio Rental
. UCLA Reading Group for Summative Evaluation
. Teaching Research for Social Skills Formative Evaluation

FIG. 1. Contextual map.

"Sesame Street" on children. For example, independent research organizations were contracted to find answers to these overall questions:

1. What is the impact of "Sesame Street"?
2. Does the setting up of small ad hoc viewing groups beneficially affect the impact of "Sesame Street" or will children learn as well in the environment of their own homes?
3. Do children in preschool classrooms benefit from watching "Sesame Street" as part of their school curriculum?
4. Do children from Spanish-speaking homes benefit from "Sesame Street"?
5. Can social skills such as cooperation, empathy, and conflict resolution be taught via the television medium?

The principal agency assisting CTW in gathering these data is the Educational Testing Service. Assisting also are a research group at the University of California at Los Angeles which is assuming responsibility for the summative evaluation of the reading program, and Teaching Research, a Division of the Oregon State System of Higher Education, which is assisting in determining social and interpersonal curriculum goals for the "Sesame Street" program.

Inasmuch as the "Sesame Street" television program incorporates considerable live action and animated film segments, CTW procures film from a variety of independent film producers. A good deal of technical work is also contracted out, such as tape dubbing. CTW currently rents a television studio and is presently considering the purchase of one from Columbia Broadcasting System.

Two advisory groups assist CTW in setting up the curricula for the two television programs and in determining if educational objectives are met. One is the Educational Advisory Committee; the other is the Research Advisory Committee. Both are chaired by CTW's chief consultant.

Another working member of the organization is CTW's Director of Public Information who is also an executive of Carl Byoir Associates, Inc., an advertising agency. This firm makes a practice of actively involving its representatives in the operations of those organizations, such as CTW, to whom they have contracted.

Relationships to other efforts of an overall program. In spite of its apparent success, CTW is concerned about funding. One solution to the problem may be found in CTW's proliferation of nonbroadcast activities. The revenue from publishing, production of books, records, puzzles, games, etc., may provide some relief from the pressing financial problems of this large enterprise. CTW's operations in foreign countries are also a possible source of income, although these ventures are viewed mainly as missionary in nature.

Time lines. The following is a brief timetable for the second season of "Sesame Street":

Spring 1970:

1. Staff and advisors review of first season.
2. Seminars on new instructional goals (to continue into summer as necessary).

Summer 1970:

1. Organization of utilization activities for fall season and training workshop for utilization staff.
2. Staff meeting with selected advisors to set new instructional goals for second season.
3. Development of formative research plan to accompany above.
4. Production and evaluation of pilot sequences in new curricular areas.
5. Evaluation of first season summative research, and development of summative evaluation strategy for second season.

Fall 1970 - Spring 1971:

1. Production and broadcast.

The research activity time line for the 1970-1971 broadcast season is given in Figure 2. These activities tie in directly with decisions concerning the curriculum of the two television programs. Certain of these activities are ongoing, such as the preparing of reports and conducting summative research and evaluation for "Sesame Street." It should be noted also that the research department is involved with the production department in continually assessing broadcast effectiveness.

Physical/environmental setting. At the time of the interviewing, CTW conducted its operations in five buildings (four of which were in close proximity). In general, the facilities seem to be quite adequate, but there is nothing about the working spaces and offices to suggest luxury. Most of the high level staff are situated in offices on two floors of an office building in Manhattan. The color of the office space is primarily white, but the brightly colored furniture and colorful posters offer a pleasant contrast. There are some crowded conditions on these floors, and a number of persons--managers as well as secretaries--have their desks in areas which were not originally designated as offices. Working space in other buildings appears to be adequate but not ideal. The redeeming feature of the physical setting in the building which houses most of the managers of the Workshop is that the managers are very close to one another and communication is quite easy.

One of the advantages of being located in a large urban area is the availability of the many resources needed to carry on a complex enterprise such as CTW. Human resources and technological resources are quite accessible; and so, in spite of the usual problems of obtaining satisfactory services and materials, CTW personnel are "privileged" to be working in downtown Manhattan. In summary, the setting of CTW is what one might expect of any project situation in the heart of the nation's largest city.

Activities	Spring 1970	Summer 1970	Fall 1970	Winter 1971	Spring 1971	Summer 1971
I. Curriculum						
A. Sesame Street, first session (SS_1)						
1. Catalog, describe and review SS_1 curriculum for SS_2 implications.	X					
B. Sesame Street, second session (SS_2)						
1. Conduct curriculum seminars for SS_2.	X					
2. Operationally define the instructional goals for SS_2.	X					
3. Prepare Writers' Manual in new and revised SS_2 goal areas, incorporating implications of earlier research.	X	X	X			
4. Review scripts and sketches for new SS_2 production materials, incorporating implications of earlier research.		X	X	X		
C. Reading Show pre-proposal activities						
1. Conduct reading seminars.	X					
2. Identify potential reading goals.	X	X	X			
3. Develop and field test potential curriculum elements for Reading Show.		X	X			
II. Instructional Development						
A. Develop preliminary instruments for new and revised SS_2 goals.	X					

FIG. 2. Research activity time line for 1970-1971 broadcast season.

Activities	Spring 1970	Summer 1970	Fall 1970	Winter 1971	Spring 1971	Summer 1971
B. Contract for final development of new measuring instruments for SS_2.	X					
C. Develop preliminary instruments for testing experimental Reading Show segments.		X	X			
III. Research Reports and Reviews						
A. Prepare formative research section of SS_1 final report, emphasizing production implications for SS_2.	X					
B. Prepare reports on SS_1, SS_2, and Reading Show, for professional meetings and journals.	X	X	X	X	X	X
C. Review summative pretest and posttest data for SS_2 research and production implications.	X	X	X			
D. Prepare comprehensive research.		X	X			
E. Prepare interim (primarily inhouse) reports on the research activities for SS_2 and the Reading Show.	X	X	X			
F. Prepare a combination report and proposal for the Reading Show.			X			
G. Prepare comprehensive final report for SS_2.						X
IV. Formative Field Research and Related Activities						
A. Prebroadcast research for SS_2.						

FIG. 2 cont.

Activities	Spring 1970	Summer 1970	Fall 1970	Winter 1971	Spring 1971	Summer 1971
1. Test for present performance range of target children in new and revised SS_2 goal areas, using preliminary versions of SS_2 tests.	X	X				
2. Conduct appeal-related field research in preparation for SS_2.	X	X	X			
3. Conduct achievement-related field research for SS_2.	X	X	X	X		
4. Review existing data and test for performance range of target children in prospective Reading Show goal areas.			X			
5. Conduct appeal-related field research on target children for the Reading Show.		X	X			
6. Conduct achievement-related field research for the Reading Show.		X	X			
B. Progress testing during SS_2 broadcast period						
1. Plan and contract for SS_2 progress testing.	X	X				
2. Execute, interpret, and report results of SS_2 progress testing, with implications for production.			X	X	X	
C. Pre-proposal research for Reading Show	X	X	X			
D. Conduct any necessary supplementary analyses of SS_1, summative data, and prepare related reports.		X	X			

FIG. 2. cont.

Activities	Spring 1970	Summer 1970	Fall 1970	Winter 1971	Spring 1971	Summer 1971
V. Summative Research and Evaluation for SS$_2$						
A. Develop proposal and contract for summative evaluation of SS$_2$ impact.	X	X				
B. Monitor progress of summative evaluation for SS$_2$.			X	X	X	X
VI. Interact with researchers conducting directly related but independently supported studies	X	X	X	X	X	X

SS$_1$ - First year of "Sesame Street" operation.

SS$_2$ - Second year of "Sesame Street" operation.

FIG. 2. concluded.

Chapter II: Parameters of the Project

This chapter discusses the staffing patterns of CTW, provides descriptions of the outputs analyzed, and presents a map of all outputs identified.

Project Structure

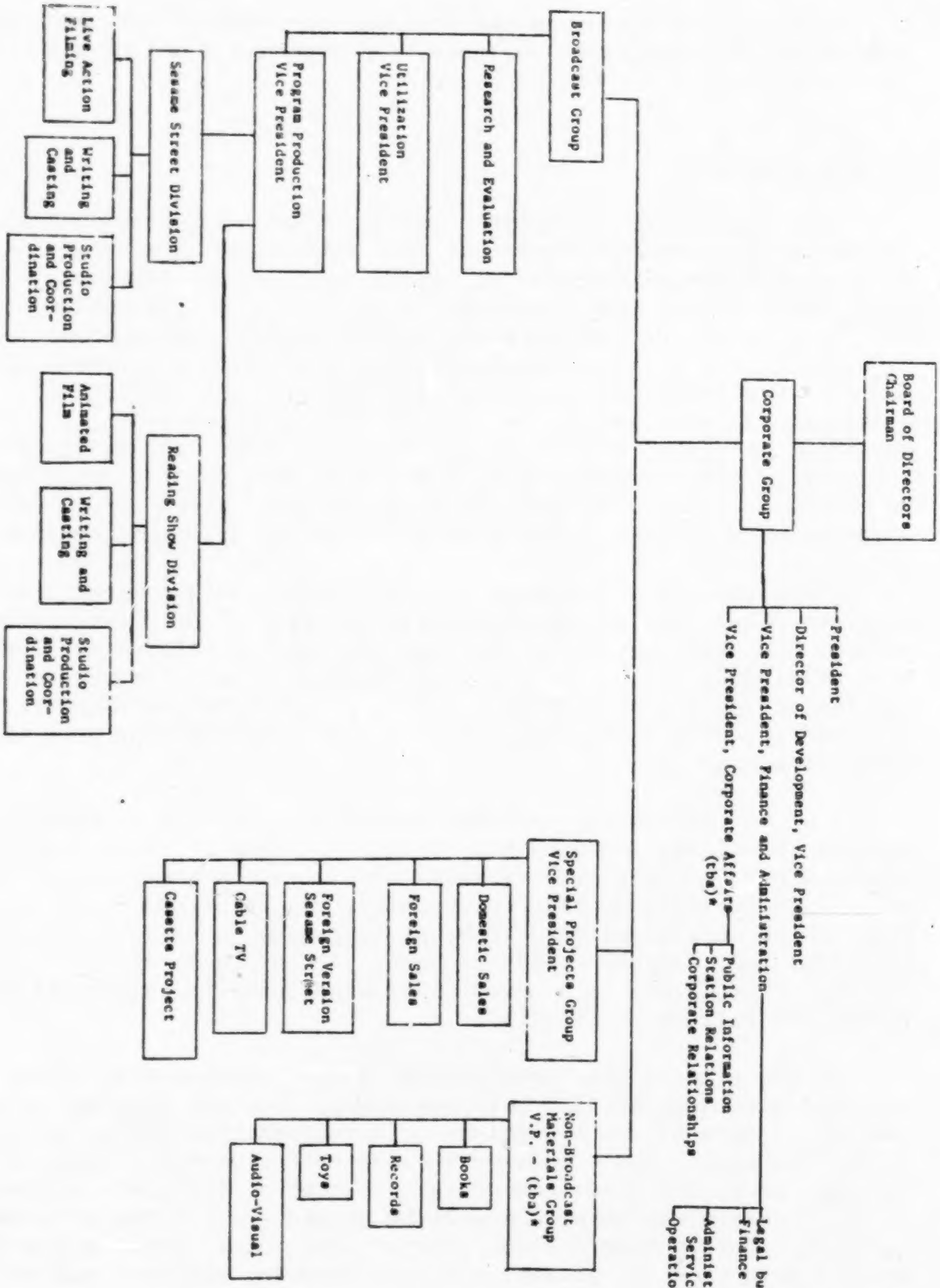
Staff structure. A representation of the organizational structure of CTW is presented in Figure 3. This figure indicates that the Board of Directors of the Corporation, which includes the President, determines the policies and directions of CTW. The interpretation of these decisions is made by the President to the vice presidents and other managers. In the case of CTW, the President and the Chairman of the Board of Directors are in continual communication. Importantly, the President and such persons as the Director of Development, the Vice President in charge of Finance and Administration, and the Executive Producer are also frequently in touch with one another. Although CTW is housed in five buildings, these key managers have offices within a relatively small area of the same floor of the principal building.

There are three divisions of CTW: the Broadcast Group, the Special Projects Group, and the Non-Broadcast Material Group. Interestingly enough, the Broadcast Group includes not only television production but also utilization of research and evaluation. Such a structure reflects the importance and dependence which is placed upon the Research Department and the Utilization Department by the people who produce the television programs.

A number of special projects have grown out of the initial experiment in television for preschool children. Some of these significant developments in CTW's history have to do with the distribution of television programs outside the country, the creation of new television programs to be accomplished in other languages, a cable television facility, and a cassette-film project. All of these projects are directed by a person with a wealth of experience in commercial television and related activities.

At the time of the interviewing, a vice president in charge of nonbroadcast materials had not been named. Not too long beforehand, however, a manager was brought in to direct the publishing activities of the Workshop. CTW's policy is to negotiate with producers of books, records, toys, and other commercial products on the basis of the understanding that these materials will be priced so that the children who can most benefit from them will be able to have them. Such contracts are entered into with the primary goal of educating children and the secondary goal of enhancing the Corporation's financial position.

Project roster. During the week in which the interview team was in New York a total of 18 persons were interveiwed. These included nearly all key managers and those who were determined as holding key positions.


Board of Directors
Chairman
Corporate Group
President
Director of Development, Vice President
Vice President, Finance and Administration
Legal business
Finance
Administrative Services
Operations
Vice President, Corporate Affairs (tba)*
Public Information
Station Relations
Corporate Relationships
Broadcast Group
Research and Evaluation
Utilization Vice President
Program Production Vice President
Sesame Street Division
Live Action Filming
Writing and Casting
Studio Production and Coordination
Reading Show Division
Animated Film
Writing and Casting
Studio Production and Coordination
Special Projects Group Vice President
Domestic Sales
Foreign Sales
Foreign Version Sesame Street
Cable TV
Cassette Project
Non-Broadcast Materials Group V.P. - (tba)*
Books
Records
Toys
Audio-Visual

*(tba) - to be announced.

FIG. 3. Project organizational structure.

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A roster of the staff positions involved in the various operations of CTW can be found in Table 1. Those positions interviewed are noted with an asterisk.

Outputs Generated

The outputs generated by CTW are varied and range from tangible products to those management outcomes which facilitate or make possible the quality production and utilization of those products. The interview team identified 205 management outcomes and tangible products during this site visit. This was seen as a somewhat representative sample of possible thousands that can be identified. For interview purposes, emphasis was on obtaining data on management outcomes, thus the outputs for which annotations are available at this time are largely management outcomes, i.e., descriptions are provided for 13 tangible products and 46 management outcomes.

A complete listing of 117 tangible products and 88 management outcomes identified is provided in Appendices A and B. Brief descriptions of those which were the subject of interviews are provided below. Tangible products are described first, with management outcomes following. The code number shown is an arbitrary number composed of two parts: (a) a letter which permits easy identification of the output as a tangible product (P) or a management outcome (M); (b) a sequence number for all outputs irrespective of P or M. The numerical designation of the outputs appears in various tables and charts permitting one to examine a description and match the data from other tables to it.

Tangible products generated.

P-005 Assembled Scripts for the Reading Program. A series of scripts written by the head writer, his assistants, and regular contributors scattered over the country. The elements of an assembled script include live action pieces, bits, segments, and inserts, with the major writing task for each providing the "glue" which pulls together any previously produced insert, segment, etc., which may be specified for a particular show.

P-011 Curriculum for Reading Program. A curriculum setting forth the purposes, objectives, and content for a series of shows designed to continue an educational contribution to the established "Sesame Street" viewer. Consultants from the reading field worked with the CTW staff in establishing the curriculum and, at the time of this observation, the curriculum was being critically reviewed and pilot test data was being examined for appropriateness to the target group (inner-city children roughly 7 to 11 years of age).

P-031 Live Action Films for "Sesame Street" Shows. Produced by independent film producers. CTW maintains close monitoring of film produced to insure that each piece meets the rigors of research documentation. The successful molding of research and production in this regard, long considered by the industry as a goal unlikely to be achieved in any real sense, is seen, to CTW's satisfaction, as having met Workshop standards.

TABLE I

Project Roster of Staff by Job Title

Office of President

- *President
- Administrative Assistant
- Consultant to Corporation (2 positions)
- *Director of Development and Secretary to the Corporation
- Secretary (2 positions)

Special Projects

- *Vice President and Assistant to the President
- Administrative Assistant
- Manager of International Distribution
- Director of Special Projects
- Secretary

Non-Broadcast Division

- Editor-in-chief
- *Administrative Manager
- Secretary

Sesame Street Magazine

- Editor
- Assistant Editor
- Clerk/Typist

(continue next column)

Legal/Business Affairs

- Attorney
- Secretary (2 positions)

Finance and Administration

- *Director of Finance and Administration
- Secretary

Finance

- Assistant Director of Finance
- Secretary/Statistical Typist
- Manager--General Accounting
- Senior Financial Analyst
- Junior Financial Analyst
- General Ledger Supervisor
- Manager of Financial Planning
- Supervisor of Accounts Payable and Payroll
- Senior Accounting Clerk
- Accounting Clerk
- Clerk/Typist--Accounts Payable
- Business Manager--Utilization
- Clerk/Typist

(continue next page)

* Interviewed for this case profile

TABLE 1

Project Roster of Staff by Job Title (Cont.)

Administrative Services

Manager of Personnel

Assistant Director of Administration

Assistant Personnel Manager

Telephone Operator/Receptionist

Telephone Operator/Clerk/Typist

Mail Room Supervisor

Mail Room Clerk (2 positions)

Mail Room Clerk, part time, (2 positions)

Executive Producer

*Executive Producer

*Associate Producer

Film Consultant/Producer

Producer

Writer

Secretary

Studio Production and Coordination

*Producer

Secretary/Script Typist

Associate Producer (2 positions)

Assistant to Producer (2 positions)

Script Typist (2 positions)

Clerk, Studio

(continue next column)

Writing and Casting

Producer

Writer (5 positions)

Film Researcher

Secretary

Writers' Workshop

Writer (8 positions)

Live Action Film

*Producer

Associate Producer

Production Development (Reading)

*Producer

Assistant to Producer

Administrative Assistant

Production Assistant

Associate Producer (2 positions)

Secretary

Clerk Typist/Receptionist (2)

Special Projects

Coordinator, Youth Services

(continue next page)

TABLE I

Project Roster of Staff by Job Title (Cont.)

Operations

- *Director of Operations
- Operations Assistant (2 positions)
- Film Editor (2 positions)
- Assistant Film Editor
- Film Expeditor
- Video Tape Librarian

Research and Evaluation

- *Director of Research and Evaluation
- *Assistant Director--Sesame Street
- *Assistant Director--Reading
- Field Coordinator
- *Senior Curriculum Specialist
- Curriculum Specialist
- Researcher (2 positions)
- Researcher, part time (2 positions)
- Secretary (3 positions)

Public Information and Project Utilization

- *Director of Information and Utilization
- Assistant Director
- Coordinator for Correspondence
- Editorial Supervisor
- Secretary (2 positions)
- Clerk/Typist

(continue next column)

National Utilization

- *Director of Utilization
- Deputy Director of Utilization
- Resources Coordinator
- Surveys and Evaluations Coordinator
- Field Services Coordinator
- Executive Secretary to the Director of Utilization
- Secretary to Deputy Director of Utilization
- Training Coordinator
- *Sesame Street Magazine Distribution
- Clerk/Typist
- Receptionist/Typist

Model Viewing Center

- Project Developer
- Bi-Lingual Program (Vineland Public School System)
- Latin Affairs Coordinator
- Spanish Editor
- Administrative Assistant

(continue next page)

TABLE 1

Project Roster of Staff by Job Title (Concluded)

Coordinators--Utilization Cities

Coordinators (13 positions)
Assistant Coordinator (5 positions)
Area Supervisor (2 positions)
Field Supervisor
Junior Field Supervisor
Secretaries
Clerk/Typist

Coordinators and Secretaries in:

New York-Newark,
Philadelphia,
Los Angeles,
Washington, D.C.,
Baltimore,
Detroit,
Boston,
Oakland,
Jackson,
New Orleans,
Chicago,
Dallas-Fort Worth

Assistant Coordinators in:

Philadelphia,
Los Angeles,
Washington, D.C.,
Baltimore,
Detroit

P-045 *Writers' Notebook*. A collection of ideas, situations, and observations which are designed to be of use to writers in producing scripts. The primary source of material is the research data generated through observations made of children in given situations. Research based items are calculated to provide writers with a sense of the "real world" perceptions of young children as observed in natural or contrived settings. Other ideas may be entered by any staff member having an idea judged to be worthy.

P-048 *Sound Tracks for Films and Animated Segments*. That portion of the production effort which provides for the logical and artistic matching of sound and effects to the visual materials. Attention is also directed to the ages and types of persons to be used for appropriate voice recording.

P-119 *Formative Goal Area Tests*. A series of tests or measures taken from young children specific to a content area. The results of these tests or measures provide data to be used to identify and improve weaknesses in a pilot program. Included in this category are those "testing" situations designed to provide observational data describing typical child behavior in a goal area.

P-124 *Promotional Film for Reading Program*. A film produced to announce and promote the new reading program to be broadcast in the next season. The film sets out the features of the new program and consists of clips from various production outputs.

P-125 *Progress Reports to USOE (every 3 months)*. A document produced by the Director of Development, at regular intervals, which marks the status of developmental efforts. In addition to submission to the primary sponsor calling for the reports, distribution is also made to other sponsors of CTW.

P-177 *Magazine Articles*. Articles that are published in "popular" magazines regarding CTW and its operations. When such articles have as their source testimony or interview data from CTW personnel, the activities of M-174 prevail.

P-178 *Newspaper Articles*. Same purposes and activities as with P-177.

P-179 *News Releases*. Same purposes and activities as with M-174.

P-183 *Field Research Data (Collected)*. Data generated by the research department which plays a key role in specifying subject matter approach, techniques to be employed, functional operating levels to be used in programming, etc. Field data is generally collected through systematic observation of children in live field settings. Where appropriate, standardized tests are used in addition to specialized observational sets generated by research personnel for specific goal areas.

P-193 "Sesame Street" Television Programs. A primary focal output of CTW. Finished, ready-for-broadcast shows are the result of a complex, coordinated set of activities which link producers, researchers, and broadcasters together in achieving programs of mutually agreed upon levels of excellence. Close monitoring of work schedules and production tasks, and critiques of each program by research as well as production personnel, result in programming which meets the standards set forth by CTW.

Management outcomes generated.

M-038 Budget for CTW Operations. An annual projected budget prepared by the finance officer based on previous years' budgets and projections prepared by each Workshop department. As projections and levels of funding are aligned, major efforts are extended to keep costs near the projections. The finance officer maintains full awareness of operational problems.

M-047 Screening Critique of "Sesame Street." Critical reviews of each show prior to broadcast. In assessing the look and feel of the show, critiquers look for adherence to script, use of specified segments, technical errors, etc. Appropriate revisions are made as noted.

M-049 Writers' Assignment Sheets. A record of writing assignments for each individual program. An associate producer consults with the research department to determine which segments, bits, or inserts are relevant to given curricular areas. Upon assigning writers, the educational goals are explained and existing materials specified for use listed. Follow-up of written materials occurs to insure that all inclusions have been made.

M-060 Distribution System for Sesame Street Magazine. A system involving a network of distribution centers in major cities and an extensive mailing list. The system accommodates a controlled, broad distribution of free issues to children in families not able to pay subscription rates.

M-094 Dissemination of Research Information. The transmission of research findings to interested or related audiences inside and outside CTW. The Research Director prepares and delivers reports and speeches to outside sponsors, educational, and political groups, etc. He further critiques materials prepared by other staff and works to facilitate an interface between researchers and producers.

M-108 Utilization Staff Welfare. A condition of staff that results in staff reflecting high morale and a sense of cooperation. Emphasis is on listening to staff and keeping all concerned informed about problems that arise. An indication of satisfactory achievement of staff welfare is seen in a relatively small attrition rate.

M-123 Speeches to Outside Groups on CTW's Operations. With the broad awareness of "Sesame Street," a great many requests for speeches are made to the Workshop and in particular to its President. CTW makes an effort within the constraints of budget to keep a wide variety of audiences informed about its objectives and methods.

M-131 Management of Production Personnel. For some indication of the complexities involved in managing the personnel of the Production Department, see the tasks listed for this product in Appendix D.

M-146
M-147 Relationships with Public/Commercial Television Networks. The "Sesame Street" program has historically been broadcast by public and educational networks. Commercial stations have sought the program and, upon agreement regarding no advertising during the show, CTW is authorizing commercial stations use of the program. A primary objective of this expanded distribution is to achieve broadcast reception in inner-city and other areas not otherwise covered by public or educational television. Such operations require considerable attention to establishing and maintaining effective working relationships with networks and their independent stations.

M-148 Formulation of Policy for CTW. A set of guiding principles established by a Board of Directors. The Chairman of the Board of Directors and the President of CTW in particular hold leadership influence on the policymaking activities.

M-149 Solicitation of Funds for CTW. The procurement of operating funds, an ongoing activity closely associated with the budget projecting activities. As the policymaking group identifies and establishes priorities for CTW activities, the need for the financial base to support any expanded or broadened effort becomes apparent. Sponsors are sought and identified to provide assistance in a variety of specialized or general ways.

M-150 Implementation of Flexible Budgeting. The initiation of a system by which major budget changes may be made during an operational year so as to meet any newly identified priority of needs. To facilitate responsible action in this regard, reports for every department are prepared on a regular basis outlining expenditures, current status, and the new projections in light of those things.

M-151 Monitored Operations for Consistency of Philosophy. The insuring that CTW efforts continue to reflect a commonality of goal and objective. Carried on primarily by the President and other top management persons, these activities have become increasingly important and complex as the Workshop expands in size, scope of effort, and number of significant product outputs.

M-152 Overseeing of Production Activities for CTW. The effecting of efficiency and quality in production efforts. The Executive Producer places primary emphasis on finding production personnel in whom he has the greatest confidence, thus reducing direct supervision requirements to one of "trouble shooting when the occasion demands." Occasionally he makes adjustments in producer and writer assignments to maintain the level of operation he is seeking.

M-153 Adequate Staffing for Studio Production. The procurement of studio production people capable of high quality production. While salaries offered are not at the level found in commercial television, there is generally an absence of dysfunctional friction among staff members and the staff is generally considered one of the best in the business.

M-154 Procurement of Funds for Cable Television Operations. The procurement of funds in support of cable TV distribution of CTW shows. This activity involves establishing and maintaining contacts and coventures with other businesses and corporations, as well as negotiating contracts for cable operations.

M-155 Determination of Feasibility of Cable Television Operation. The establishment of ways in which cable television might best serve the goals of the Workshop. Considerations include CTW's policies and objectives, cost factors, etc. This activity correlates with M-154 and results in information regarding costs and advantages upon which judgment can be made.

M-156 Procurement of Staff for Cable Television Operations. The procurement of essential staff required to conduct the business of cable TV operations. This outcome is a result of activities similar to M-154 (above), but one in which advantage is taken of the expertise of corporations cooperating in the effort.

M-158 Determination of Feasibility of International Television Operations. The effecting of a feasible system for foreign broadcasting of "Sesame Street." Negotiations are being conducted in South America, Europe, and Asia.

M-160 Maintained Atmosphere in Which People Feel Effective. The effecting of a condition in which personnel feel they are carrying on quality work and have an influence on the areas of activity in which they work. Sucess in this effort, coupled with the feeling that CTW is doing something worthwhile, may be seen as a high morale factor among staff.

M-161 Expansion of Distribution of CTW Products. The expansion of the impact of CTW products. This includes the nurturing of relationships with appropriate organizations and negotiating with respect to such items as a film-cassette capability, foreign film distribution, a production studio in Mexico City (for Spanish language programming), and foreign broadcasting.

M-162 Expansion of Availability of CTW Products. The enhancing of the availability of CTW products. This activity is closely associated with M-161, but includes exploration of additional marketable ideas which would create new products adhering to the policies set forth for nonbroadcast materials (see M-189).

M-163 Procurement of Funds for Film-cassette Capability. The procurement of funds which will enable the production of film-cassettes of CTW shows. This activity is concomitant with M-154, and at the management level involved is not discriminated from it in terms of tasks.

M-164 Determination of Feasibility of Film-cassette Capability. The determining of the feasibility of CTW production efforts including a film-cassette distribution technique. This activity correlates with M-163, and results in information regarding costs and advantages upon which judgments can be made.

M-165 Procurement of Staff for Film-cassette Capability. The procurement of the necessary staff to carry out the production of film-cassettes of CTW shows. An outgrowth of M-163 and M-164, the activities include those of M-156.

M-166 Procurement of Funds for Foreign Film Distribution. The procurement of funds in support of transportation costs involved with overseas shipment and distribution. Included in this activity are considerations paralleling those of M-154.

M-167 Determination of Feasibility of Foreign Film Distribution. The determining of the advantages and disadvantages of foreign marketing of CTW shows. This activity correlates with M-166 and results in information upon which judgments can be made.

M-168 Procurement of Staff for Foreign Film Distribution. The procurement of the necessary staff required to carry out the tasks involved with the distribution of CTW shows to foreign markets. An outgrowth of M-166 and M-167, the activities include those of M-156.

M-169 Procurement of Funds for New Studio in Mexico City. The procurement of funds to finance the obtaining and maintenance of a production studio in Mexico City. This outcome is expected to facilitate the development and broadcast of Spanish language programs. Included in this activity are considerations paralleling those of M-154.

M-170 Determination of Feasibility of New Studio in Mexico City. The determining of the feasibility of operating a production studio in Mexico City to enhance the production of Spanish language programming. This activity correlates with M-169 and results in information on which judgments can be made.

M-171 Procurement of Staff for New Studio in Mexico City. The procurement of the necessary production staff to carry on production activities related to Spanish language programming. An outgrowth of M-169 and M-170, the activities include those of M-156.

M-172 Organizational Management Structure. The effecting of a dynamic management structure capable of adapting to changing operational functions over time. Initially, efforts were aimed at building a rapport between the "business" people and the "creative" people of CTW (that is, between those who are engaged in the artistic pursuits and those who are not). It has meant periodically reviewing the goals and directions of CTW, and recommending and implementing new functional organizational structures as project functions change and cycle.

M-173 Planning for Future CTW Development. The keeping in perspective of the emerging directions of CTW efforts and systematically examining needs and priorities in programming for young children. Such activities allow for careful analysis of the capabilities required to effect further development and an initiation of a search for these resources.

M-174 Information Dissemination. The release of information to the public regarding CTW. A Director of Public Information coordinates this activity, assures critical review of the information to be released by the appropriate management levels, and works to establish appropriate levels of Workshop visibility in all instances of public presentation.

M-175 Text for Congressional Testimony. A document prepared by the Director of Public Information which sets forth the nature of CTW, its goals and philosophies, modes of operation, etc. Such a document is designed to concretely inform legislators about an operation having a visible influence over the nation's preschool population and the parents involved.

M-176 Speech Texts. Documents containing the texts of speeches delivered to various audiences around the country. The purpose of such documentation is to permit review and critique by management staff and to provide a permanent record of the information disseminated. As with any information dissemination (M-174) activity, the Director of Public Information coordinates production, review, and presentation of the texts, frequently performing all three functions himself.

M-180 Intra- Interagency Relationships. A condition sought which keeps CTW operations and particularly the research role in perspective with other agencies. Along with other staff members, the Director of Research concerns himself with such matters as the relationship of CTW to educational television, the relationship of CTW to the field of childhood education, the role of the Research Department in providing information (publicity) to the news media, and the optimal working relations which can be achieved with the Production Department.

M-181 Provided and Maintained Adequate Research Staff. The procurement and maintenance of a research staff capable of adapting to the chnaging functions of the research effort. Attention is given to the selection of people who carry with them a sense of balance between hard empirical research and the realities of real contexts. Evidence of adaptability is judged on the basis of quickness of learning and overall range of skills.

M-182 Relationships with Cities and Communities. The effecting of relationships within communities that elicit mobilizing-responses of citizens toward conducting programs which maximize the viewing and impact of CTW programming. These activities include preparation of trained coordinators to provide leadership within the communities, the preparation and conduct of information and training programs for lay persons, the generation of resources of viewing centers, TV sets, etc.

M-184 Training of Production Staff. The broadening of the skills of staff. Personnel are hired on the basis of expertise in given areas but, as a matter of policy, work is assigned periodically in other areas to provide personnel with a breadth of knowledge and understanding of total operations.

M-185 Storage and Handling System for Films and Video Tapes. A system of indexing and annotating produced inserts, segments, and bits in a manner that permits identification and efficient retrieval by writers and production personnel. Repeated use of such units require their storage under controlled temperature and humidity conditions to maintain the quality of picture produced by those units.

M-186 Procurement of Technical Equipment and Facilities. The procurement of equipment and facilities at the lowest possible cost. The public service character of CTW activities helps in obtaining expensive production hardware at a cost which might otherwise inhibit productivity.

M-187 Staffing of Production Development Department. The procurement of staff personnel who are adaptive, creative, and who demonstrate the ability to become intensely interested in the things that interest children. Care is taken in interviews to note whether the candidate generates any excitement about the use of commercial television techniques and advertising to convey educational messages to children.

M-188 Staffing of Production Department. The procurement of production crews, exclusive of studio personnel. Additionally, there is participation in the selection of cast members for the shows.

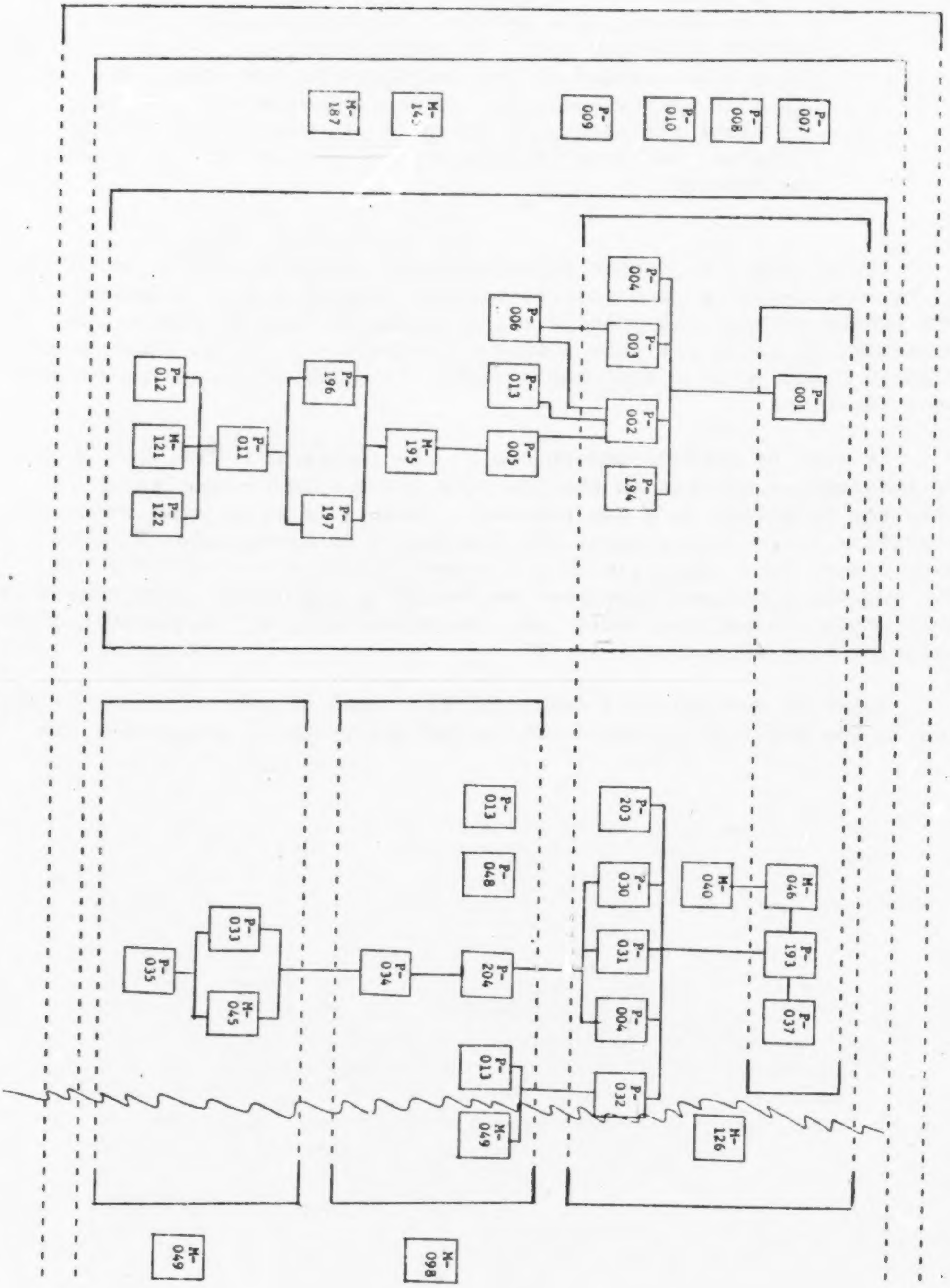
M-189 Plan for Non-Broadcast Program. The coordination and control of the commercial production and distribution of CTW related products, and the monitoring of adherence to Workshop specifications for them. CTW has formulated and maintained a policy in associating itself with commercial organizations:

> the price a child or his parent must pay to obtain a toy, game, record, or book cannot be beyond the ordinary reach of a relatively poor family. Accordingly, some of the earlier alliances with publishers have been severed because the prices charged by the retailers of the items were too high for ghetto children. Other criteria are used too, including the safety of the product, whether it is well designed, and most importantly whether it carries a learning message.

Output map. A graphic representation of the products identified by the interviewing team is presented in Figures 4 - 10. Because of the number of products identified, a series of several figures is necessary to represent this output. Collectively, then, these seven figures comprise an output map of CTW's tangible products and management functions.

It must be clearly understood by the reader that the vast amount of information present on the CTW site could only be sampled in the time the interview team was present. These interrelationships do not therefore claim to represent all that was then taking place at CTW. Each figure is a composite of any number of the departments at CTW. The outputs could and have been separated by department, but displaying this in the output map would deny the opportunity to illustrate interrelationships of outputs.

Refer to Appendices A and B for the names of the outputs corresponding to the arbitrary identification numbers given in the output map.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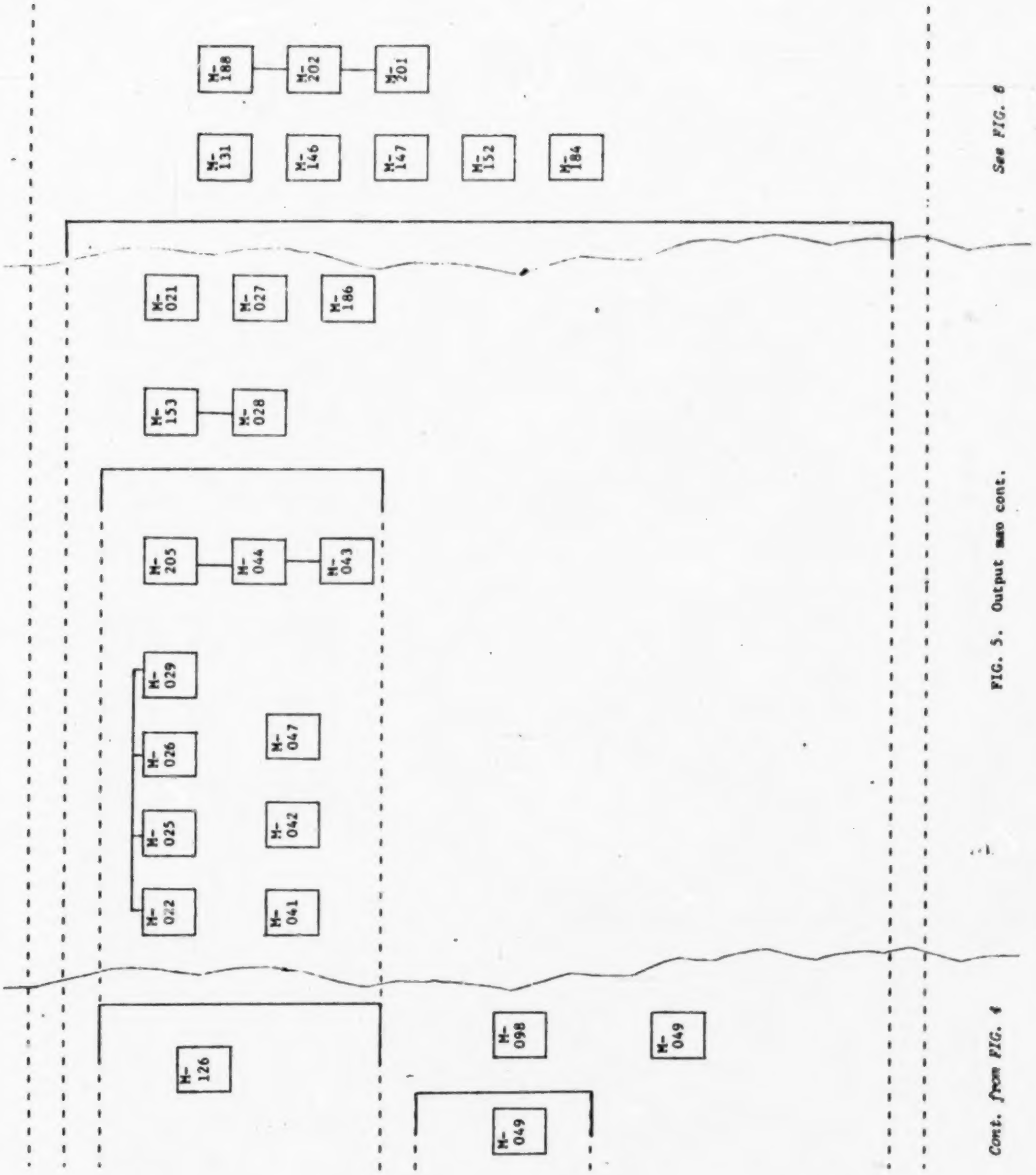
M-049
M-098

FIG. 4. Output map.

See FIG. 5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M-029
M-026
M-025
M-022
M-047
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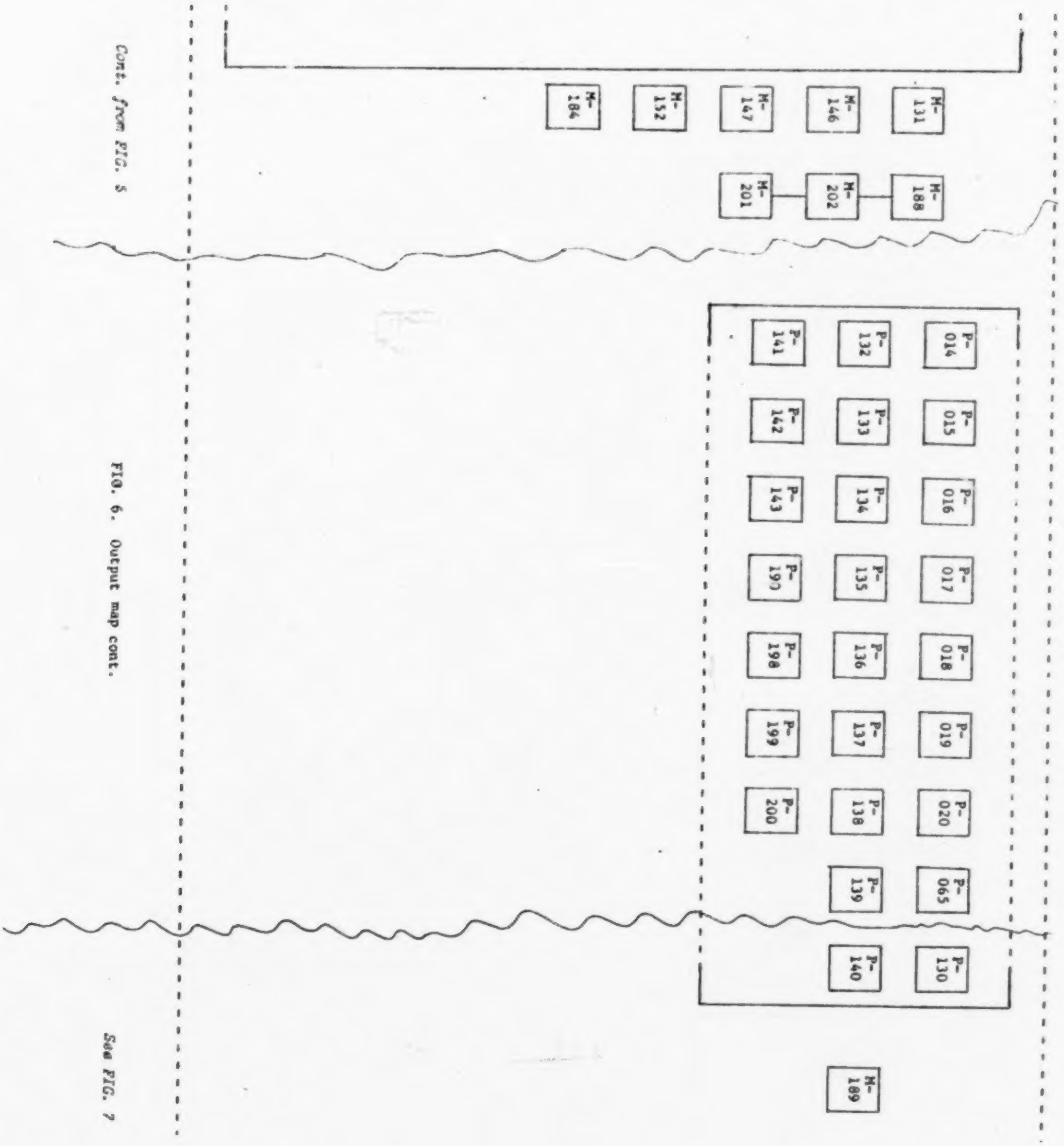
M-049
M-049

Cont. from FIG. 4

See FIG. 6

FIG. 5. Output map cont.

Cont. from FIG. 5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P-137
P-138
P-139
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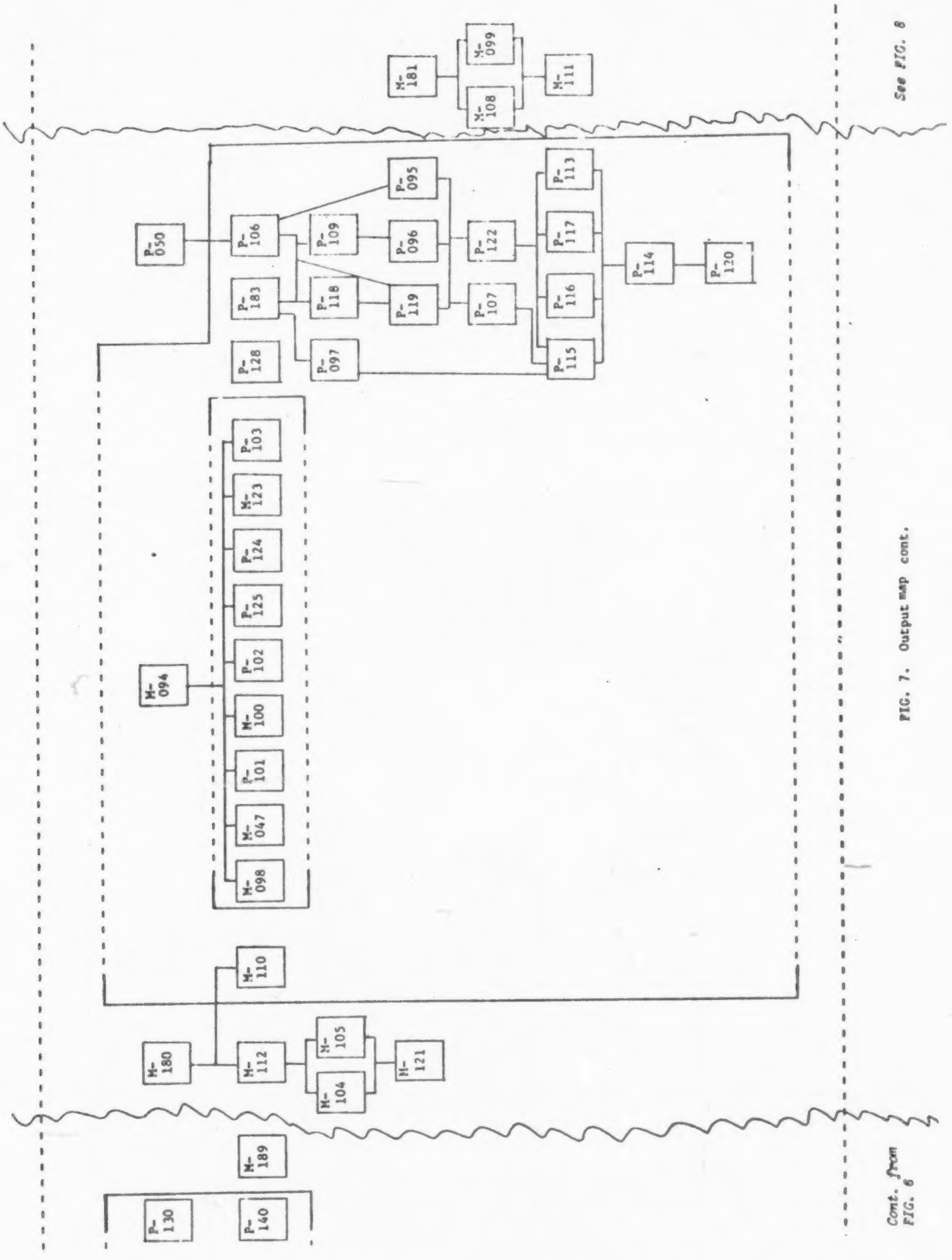
P-200
M-189

FIG. 6. Output map cont.

See FIG. 7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P-124
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P-101
M-047
M-098
M-110
M-180
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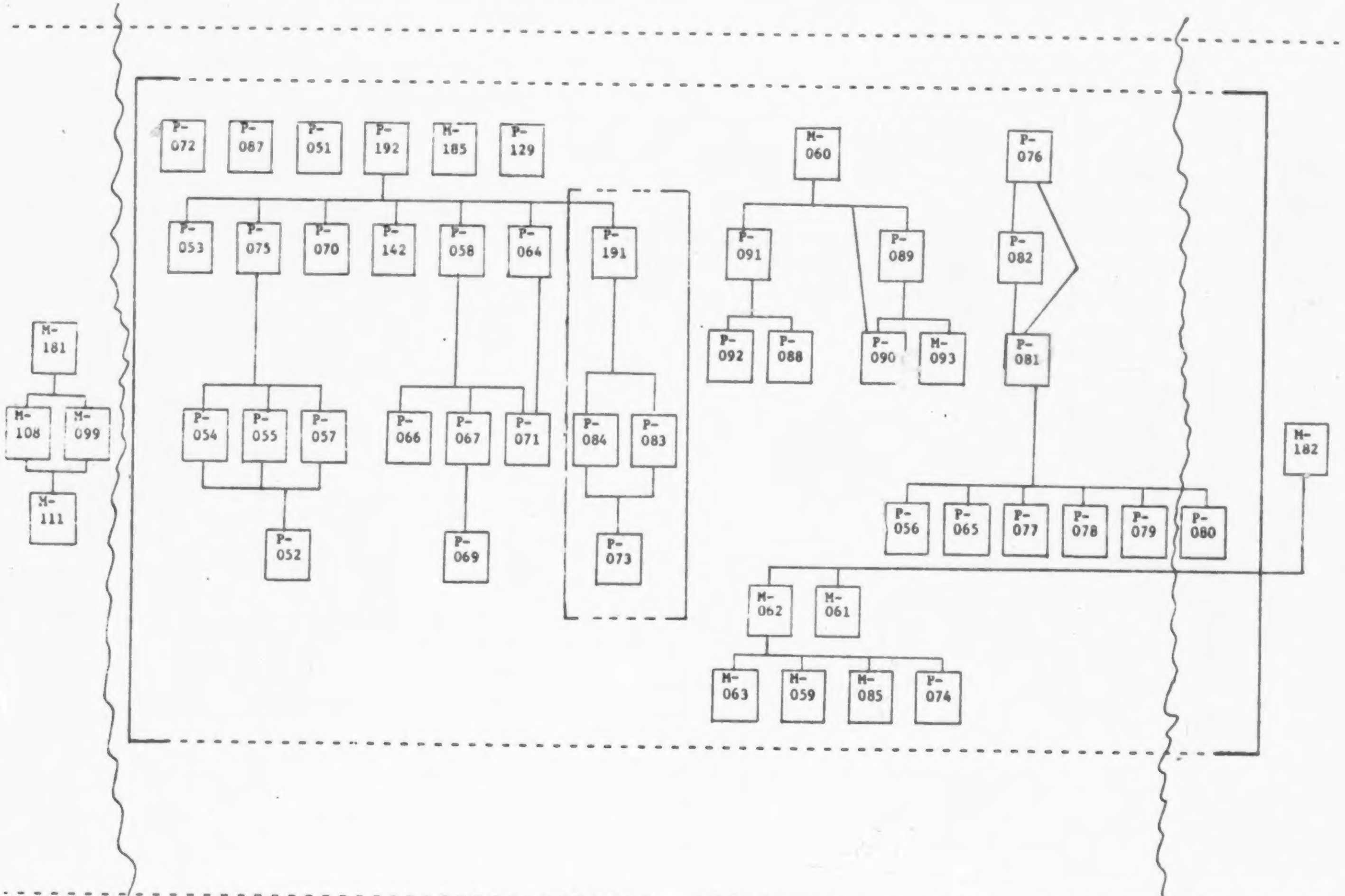
P-140

See FIG. 8

Cont. from FIG. 8

FIG. 7. Output map cont.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P-056
P-065
P-077
P-078
P-079
P-080
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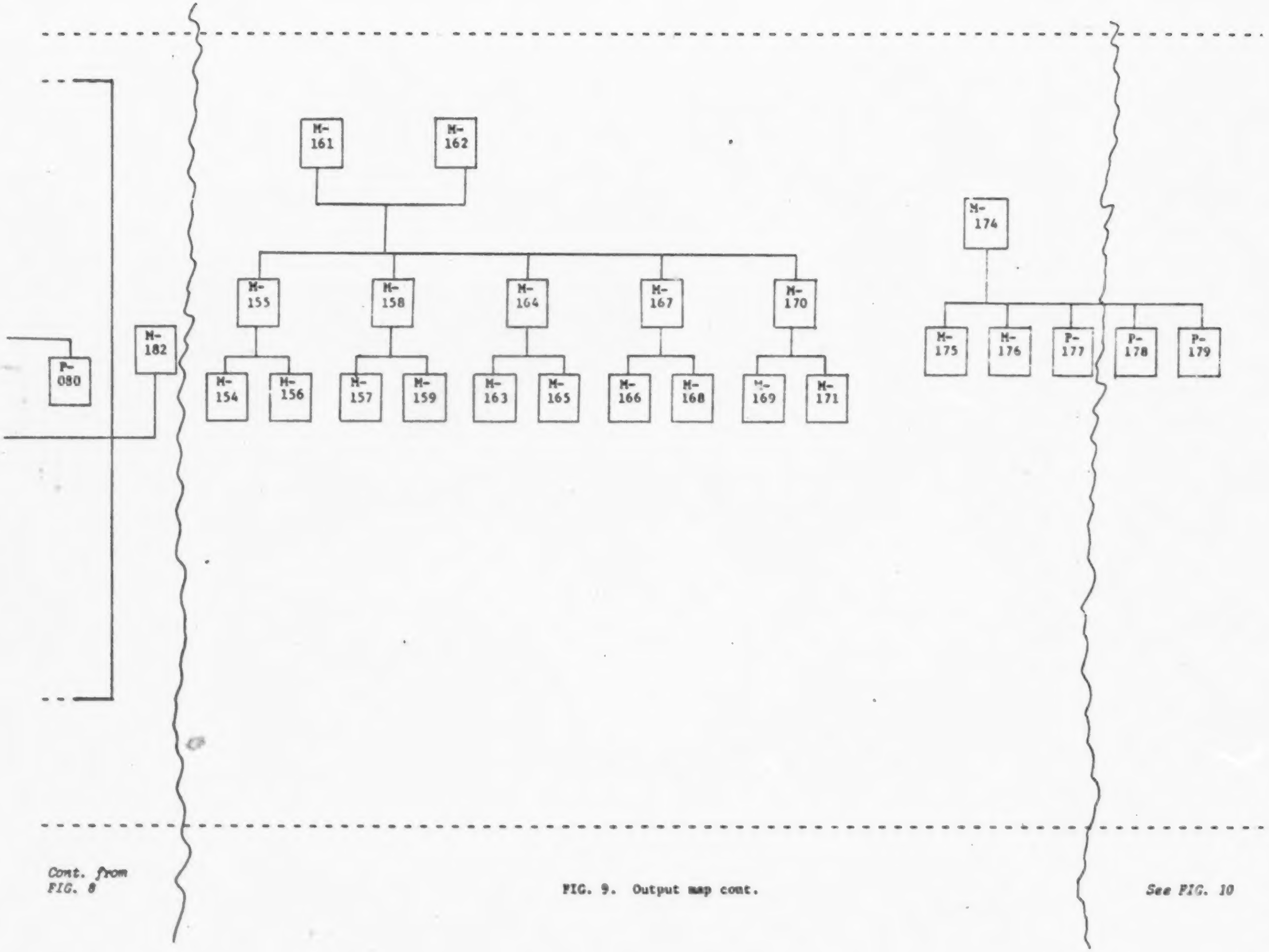
M-063
M-059
M-085
P-074

Cont. from FIG. 7

FIG. 8. Output map cont.

See FIG. 9

261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M-166
M-168
M-169
M-171
M-174
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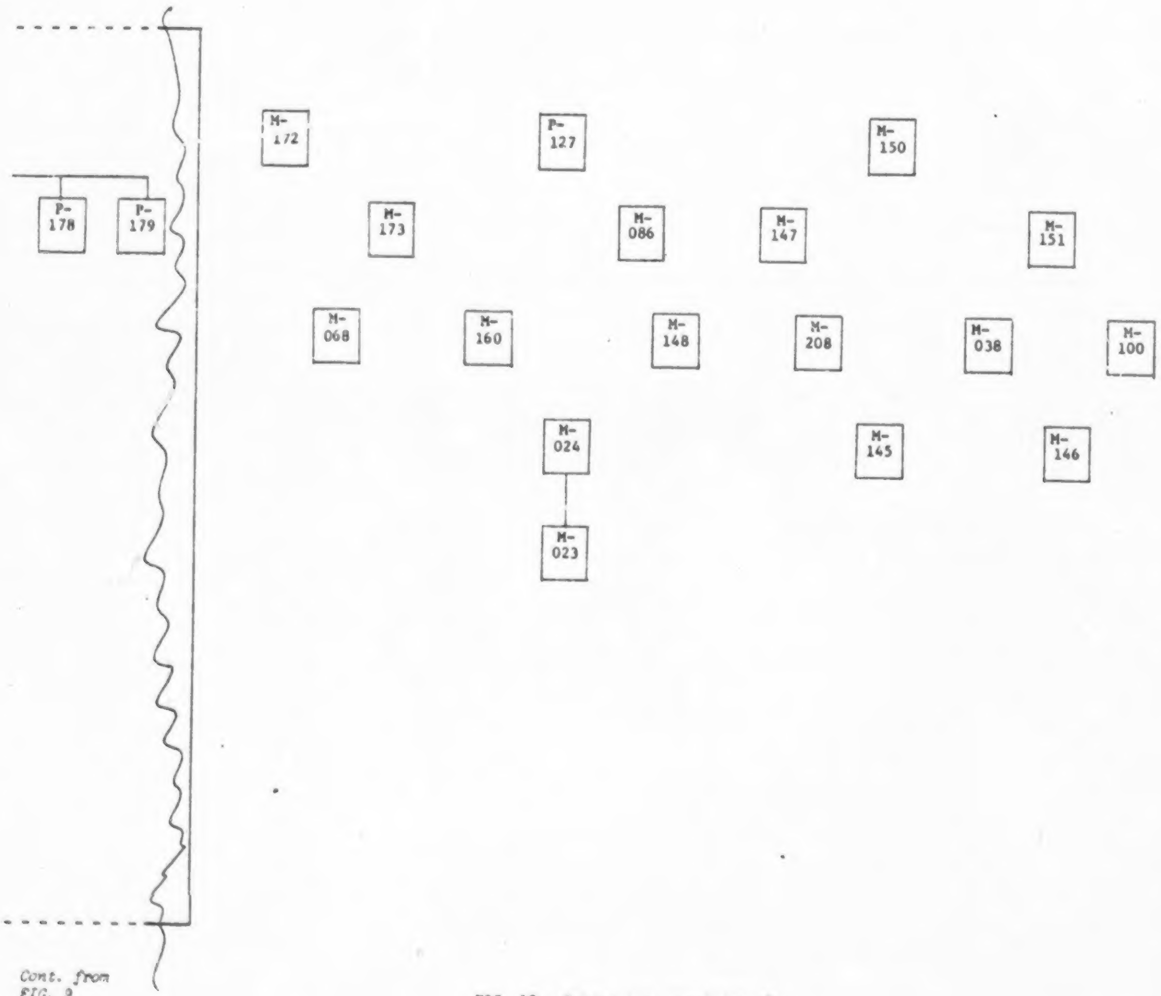
P-179
P-080
M-182

Cont. from FIG. 8

FIG. 9. Output map cont.

See FIG. 10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M-145
M-151
M-038
M-146
M-100

Cont. from
FIG. 9

FIG. 10. Output map concluded.

Chapter III: Summary of the Data

Data were gathered around the selected outputs described in Chapter II. The interviews sought to elicit for each output to be analyzed the standards by which one judges the satisfactory completion of the output, the tasks required to generate an output meeting those standards, and the enablers (knowledges, skills, sensitivities) which facilitate the carrying out of those tasks. Presented first is a summary discussion of each of the major category sets of data, i.e., standards, tasks, and enablers, followed by a series of tables (tables 2-7) which presents the frequencies with which various categories of statements were made within each set. In addition, the raw data from which the category frequencies were derived may be found in Appendices C and D.

Standards Held for CTW Outputs

The statements elicited from interviewees are somewhat varied, but major themes emerge as these statements are examined in light of categories of standards. The successful completion of an output is measured in terms of its acceptance by the intended user. Acceptance of CTW programming by viewers--i.e., they watch it--emerges no more relevant than acceptance of research outputs by producers. Indicators of public awareness, completeness of content, achievement of educational objectives with children, and other goal attainment criteria are applied.

Associated with these dimensions are standards dealing with the staff. There must be evidence of creativity, the ability to perceive a task and to carry it out with precision and a minimum of supervision, and an indication that personal motivations are convergent with those of CTW. All of these standards are balanced against conducting adequate operations within the budget, the budget being an output to which everyone must have agreed beforehand.

The interacting effects of standards held for various outputs is illustrated by the preceding reference to budget operations. Standards which tend to describe the outcomes of hiring practices; those which describe the expectation of creativity, autonomous practice of competence, etc.; and those which specify the performance criteria for production outputs, when adhered to, appear to have had a facilitating effect on CTW operations. Examination of the raw data and clustering of standards categories within and across outputs indicates a direct effort to produce quality products with efficiency and competency. (See Table 1 and Appendices C and D.)

Tasks Pertaining to Product/Outcome Attainment

Keeping in mind that of the 59 outputs analyzed 13 are tangible outputs finding identity in the products being diffused, and 46 are management outcomes seeking either to control, facilitate, or direct the production and diffusion of those products, it would be expected that

TABLE 2

Output Standards Cited for Each Output Analyzed

Project Outputs		Primary Categories of Standards for Outputs (category code no. and label for coding set J-1)																		
No.	Label	01 Completeness of content	02 Quantity of outputs/data	04 Communication and clarity	05 Utility or value	06 Acceptance by users	07 Personal satisfaction/feeling	09 Lack of errors/discrepancies	11 Appropriate design/content	12 Goal attainment	13 Acceptance by others (in proj.)	15 Compliance w/sponsor guideline	17 Internally consistency	19 Logical criteria	23 Successfully constrains/guides	25 Awareness that outputs exist	26 Components are complimentary	27 Good physical repair/quality	28 Operable by others	Output Totals
P-011	Curriculum for Reading Program								4					1						5
P-031	Live Action Films for Sesame Street Shows						1				1									2
M-038	Budgets for CTW Operations									1	2				1					4
P-045	Writers' Notebook	1			1															2
M-047	Screening Critique of S.S.	1					1			1	1									4
P-048	Sound Tracks of Films and Animated Segments	1					3			1	1									6
M-049	Writers' Assignment Sheets					1											1			2
M-060	Distribution System for S.S. Magazine							1											1	2
M-094	Dissemination of Research Information				1															1
P-119	Formative Goal Area Tests			1					1				1							3
M-154	Procurement of Funds for Cable TV Operation					2														2
M-155	Determination of Feasibility of Cable TV Operation					2														2
M-156	Procurement of Staff for Cable TV Operation					2														2
M-161	Expansion of Distribution of CTW Products					2														2
M-162	Expansion of Availability of CTW Products					2					1									3
M-163	Procurement of Funds for Film-cassette Capability					2														2
M-164	Determination of Feasibility of Film-Cassette Capability					2														2
M-165	Procurement of Staff for Film-cassette Capability					2														2
M-166	Procurement of Funds for Foreign Film Distribution					2														2

TABLE 2 Concluded.

Output Standards Cited for Each Output Analyzed

Project Outputs		Primary Categories of Standards for Outputs (category code no. and label for coding set J-1)																		
No.	Label	01 Completeness of content	02 Quantity of outputs/data	04 Communication and clarity	05 Utility or value	06 Acceptance by users	07 Personal satisfaction/feeling	09 Lack of errors/discrepancies	11 Appropriate design/content	12 Goal attainment	13 Acceptance by others (in proj.)	15 Compliance w/sponsor guideline	17 Internally consistency	19 Logical criteria	23 Successfully constrains/guides	25 Awareness that outputs exist	26 Components are complimentary	27 Good physical repair/quality	28 Operable by others	Output Totals
M-167	Determination of Feasibility of Foreign Film Distribution					2														2
M-168	Procurement of Staff for Foreign Film Distribution					2														2
M-169	Procurement of Funds for New Studio in Mexico City					2														2
M-170	Determination of Feasibility of New Studio in Mexico City					2														2
M-171	Procurement of Staff for New Studio in Mexico City					2														2
M-172	Organizational Management Structure		1			1										1				3
M-173	Planning for Future CTW Dev.		1			1										1				3
M-174	Information Dissemination															1				1
M-175	Text for Congressional Testimony															1				1
M-176	Speech Texts															1				1
P-177	Magazine Articles															1				1
P-178	Newspaper Articles															1				1
P-179	News Releases															1				1
P-183	Field Research Data (Collected)				1	1				1										3
M-185	Storage and Handling for Films & Video Tape									3								1		4
M-189	Plan for Nonbroadcast Programs	6				1			1	1		4								13
P-193	Sesame St. TV Program										2									2
	Category Totals	9	2	1	3	33	5	1	6	8	8	4	1	1	1	8	1	1	1	94

TABLE J

Process Standards Cited for Each Output Analyzed

Project Outputs		Primary Categories of Standards for Processes (category code no. and label for coding set J-2)																												
No.	Label	01 Personnel cooperate	02 Personnel are satisfied	03 Minimum correction required	04 Deadlines are met	06 Work structure is efficient	11 Costs consistent w/estimates	12 No obvious omissions	13 Work conducted w/in budget	14 No felt deficiencies	15 Tasks perceived & acted upon	16 External cooperation gained	17 External enthusiasm evident	18 Desired personnel obtained	20 Performance respected	21 Follow-on proposals are funded	24 Costs acceptable for benefits	25 Staff reflect trust	26 Value and objectives match	27 Decisions result in action	28 Closure reached on questions	29 Creativity in work evidenced	30 Personnel loss not excessive	31 Overtime worked voluntarily	32 Resources available on request	33 Personal growth/productivity	34 Impact of effort favorable	35 Outputs distributed/requested	36 Employment criteria met	37 Staff adaptive to situations	Output Totals
P-011	Curriculum for Reading Program			1																											1
M-067	Screening Critique of S.S.																			1											1
M-049	Writers' Assignment Sheets									1																					1
M-060	Distribution System for S.S. Magazine																									1					1
M-094	Dissemination of Research Information										1																				1
M-108	Utilization Staff Welfare	1									3								1			1	1								7
M-131	Management of Production Personnel		2												1				1					1							5
M-150	Implementation of Flexible Budgeting						1		1																						2
M-152	Overseeing of Production Activities for CTW										1																				1
M-153	Adequate Staffing for Studio Production							1	1									1	1				1								5
M-154	Procurement of Funds for Cable TV Operation								1																						1
M-155	Determination of Feasibility of Cable TV Operation								1																						1
M-156	Procurement of Staff for Cable TV Operation								1																						1
M-161	Expansion of Distribution of CTW Products								1																						1
M-163	Procurement of Funds for Film-cassette Capability								1																						1
M-164	Determination of Feasibility of Film-cassette Capability								1																						1
M-165	Procurement of Staff for Film-cassette Capability								1																						1
M-166	Procurement of Funds for Foreign Film Distribution								1																						1
M-167	Determination of Feasibility of Foreign Film Distribution								1																						1
M-168	Procurement of Staff for Foreign Film Distribution								1																						1
M-169	Procurement of Funds for New Studio in Mexico City								1																						1
M-170	Determination of Feasibility of New Studio in Mexico City								1																						1

TABLE 3 Concluded.

Process Standards Cited for Each Output Analyzed

Project Outputs		Primary Categories of Standards for Processes (category code no. and label for coding set J-2)																													
No.	Label	01 Personnel cooperate	02 Personnel are satisfied	03 Minimum correction required	04 Deadlines are met	06 Work structure is efficient	11 Costs consistent w/estimates	12 No obvious omissions	13 Work conducted w/in budget	14 No felt deficiencies	15 Tasks perceived & acted upon	16 External cooperation gained	17 External enthusiasm evident	18 Desired personnel obtained	20 Performance respected	21 Follow-on proposals are funded	24 Costs acceptable for benefits	25 Staff reflect trust	26 Value and objectives match	27 Decisions result in action	28 Closure reached on questions	29 Creativity in work evidenced	30 Personnel loss not excessive	31 Overtime worked voluntarily	32 Resources available on request	33 Personal growth/productivity	34 Impact of effort favorable	35 Outputs distributed/requested	36 Employment criteria met	37 Staff adaptive to situations	Output Totals
M-171	Procurement of Staff for New Studio in Mexico City								1																						1
M-172	Organizational Management Structure																1				1										2
M-173	Planning for Future CTW Development																1						1								2
M-174	Information Dissemination												2																		2
M-175	Text for Congressional Testimony												2																		2
M-176	Speech Texts												2																		2
P-177	Magazine Articles												2																		2
P-178	Newspaper articles												2																		2
P-179	News Releases												2																		2
M-180	Intra- Interagency Relationships											1				1											6	1			9
M-181	Provided and Maintained Adequate Research Staff										4			1	2																7
M-182	Relationships with Cities and Communities										1	1			1				1												4
P-183	Field Research Data (Collected)										1	1			1				1												4
M-184	Training of Production				1														1				1	1							4
M-185	Storage and Handling Sys. for Films & Video Tapes						1																								1
M-186	Procurement of Technical Equipment & Facilities								1																1						2
M-187	Staffing of Production Development Department					1			1	2			1						2										7	1	15
M-189	Plan for Non-Broadcast Program																2				1								6		9
P-193	Sesame Street TV Program				1																										1
	Category Totals	1	2	1	2	1	2	1	17	3	11	3	13	1	5	1	4	1	8	1	2	1	4	2	1	1	6	1	13	1	110

the citation of task categories would show heavy clusterings under those thought of as management categories (numbers 21-33 in Table 4). This was indeed the case. Even so, the data reflects several interesting and unique features.

On the affective side, a good deal of attention seems to be given to tasks relating to staff job satisfaction. Generally this involves interpreting policy, maintaining mechanisms which facilitate consideration of staff views, and making clear to all concerned the objectives being sought. Tasks listed for Output P-131 in Appendix C contain seven citations which fall into this category.

Tasks relating to quality and accountability were frequently cited. When taken in connection with the standards cited, one sees that the orientation is toward the achievement of those standards. Of particular interest in this regard are the tasks cited under procuring professional staff, particularly those for the Production Development Department (see M-187 in Appendix D). The raw data illustrates the care with which personnel are chosen and integrated into the operations. This is again an example of actions being consistent with the standards set for their output.

Of particular note is the occurrence of tasks relating to clarifying a problem addressed across a large range of the outputs, particularly those having to do with the dissemination of information. It would seem as though a good deal of emphasis is on assuring the issuance of accurate and credible information. Another frequent citation, the procurement of systems/services, in most instances has to do with procurement of the necessary facilities, equipment, and support services for production and distribution activities. On the one hand, production capacities are requisite to the operation, while on the other, distribution capacities are a measure of the efforts of CTW to reach its target audience. In the latter case, examination of the data around those outputs having to do with distribution and utilization suggests efforts of major proportions.

Enablers Pertaining to Successful Task Completion

Consideration of enablers is in relation to categories of knowledges, skills, and sensitivities. A brief discussion of the citations within each of these category sets is called for, followed by a discussion of the data within the general enabler set.

Knowledges. In the case of the categories of knowledge cited by CTW interviewees, it is necessary to examine the raw data. Appendices C & D contain the aggregate enabler data without reference to which are knowledges, but Table 5 indicates those outputs for which knowledge requisites were cited. Briefly, knowledge requirements clustered largely around knowledge of external project variables. Knowledge of a community, its people, and institutions is considered essential if one is to have maximum success in effecting broad distribution of CTW programming. In like manner, knowledge of what is being generated within CTW, e.g., policies, objectives, direction of the efforts of others, etc., is critical to overall functioning.

TABLE 4

Tasks Cited for Each Output Analyzed

Project-Outputs		Clusters of Tasks (category code no. and label for coding set NO)																				
No.	Label	01 Clarifying problem addressed	02 Formulating objectives	03 Designing the output	04 Producing the output	05 Collecting/processing data	06 Assessing the output quality	07 Diffusing the output	21 Procuring professional staff	22 Effecting accountability	23 Procuring systems/services	24 Effecting quality control	25 Maintaining job satisfaction	26 Facilitating growth of staff	27 Enhancing physical environment	28 Maintaining equity among staff	29 Facilitating relationships	30 Effecting info. flow patterns	31 Diffusing info. within project	32 Diffusing info. beyond project	33 Effecting decision mechanisms	Output Totals
P-005	Assembled Scripts for Reading Program				1																	1
P-011	Curriculum for Reading Program	4	2	5			1															12
P-031	Live Action Films for S.S. Shows		2				5		1	1	1								1			11
M-038	Budgets for CTW Operations									16								1				17
P-045	Writers' Notebook			2	7			1										1				11
M-047	Screening Critique of S.S.				1		8			1		2						2	1		1	16
P-048	Sound Tracks for Films & Animated Segments	1		4	4		3		1		2							1	1			17
M-049	Writers' Assignment Sheet				1		1			1		2	1						2			8
M-061	Facilitation of Broadcast Reception	1		1	2					1	3							1		1		10
M-094	Dissemination of Research Information	1	1		1	1	1	1		1		5					2	2	2	2	1	21
M-108	Utilization Staff Welfare									1		2	4				2					9
P-119	Formative Goal Area Tests	1		3	2	1	2															9
M-123	Speeches to Outside Groups on CTW's Operations																			1		1
P-124	Promotional Film for Reading Program	1	1	1	1			1														5
P-125	Progress Reports for USOE (every 3 months)				1	1																2
M-131	Management of Production Personnel								4	1		5	7				1		2		2	22
M-146	Relationships with Public TV Network																			2		2
M-147	Relationships with Commercial TV Networks										1								1	2		4
M-148	Formulation of Policy for CTW								1	2		1	1				1	1	4		5	16
M-149	Solicitation of Funds for CTW									1												1
M-150	Implementation of Flexible Budgeting								1	1	2	2						1	2		2	11
M-151	Monitoring of Operations for Consistency of Philosophy											1							1			2
M-152	Overseeing of Production Activities for CTW									3		8	3						2		1	17
M-153	Adequate Staffing for Studio Production									5	1											6

TABLE 4 Cont.

Tasks Cited for Each Output Analyzed

Project Outputs No.	Label	Clusters of Tasks (category code no. and label for coding set NO) 01 Clarifying problem addressed	02 Formulating objectives	03 Designing the output	04 Producing the output	05 Collecting/processing data	06 Assessing the output quality	07 Diffusing the output	21 Procuring professional staff	22 Effecting accountability	23 Procuring systems/services	24 Effecting quality control	25 Maintaining job satisfaction	26 Facilitating growth of staff	27 Enhancing physical environment	28 Maintaining equity among staff	29 Facilitating relationships	30 Effecting info. flow patterns	31 Diffusing info. within project	32 Diffusing info. beyond project	33 Effecting decision mechanisms	Output Totals
M-154	Procurement of Funds for Cable TV Operation	1		1						1	1	6		3								13
M-155	Determination of Feasibility of Cable TV Operations	1		1						1	1	6		4								14
M-156	Procurement of Staff for Cable TV Operations	1		1					1	1	6		3									13
M-158	Determination of Feasibility of International TV Operation												1									1
M-160	Maintained Atmosphere in Which People Feel Effective												3									3
M-161	Expansion of Distribution of CTW Products	1		1					1	1	6		3									13
M-162	Expansion of Availability of CTW Products	1		1					1	1	6		3									13
M-163	Procurement of Funds for Film-cassette Capabilities	1		1						1	4		3									10
M-164	Determination of Feasibility of Film-cassette Capability	1		1						1	4		3									10
M-165	Procurement of Staff for Film-cassette Capability	1		1						1	4		3									10
M-166	Procurement of Funds for Foreign Film Distribution	1		1						1	4		3									10
M-167	Determination of Feasibility of Foreign Distribution	1		1						1	4		3									10
M-168	Procurement of Staff for Foreign Film Distribution	1		1						1	4		3									10
M-169	Procurement of Funds for New Studio in Mexico City	1		1						1	4		3									10
M-170	Determination of Feasibility of New Studio in Mexico City	1		1						1	4		3									10
M-171	Procurement of Staff for New Studio in Mexico City	1		1						1	4		3									10
M-172	Organizational Management Structure		2					4	1			3	3	1	1		1		2		1	19
M-173	Planning for Future CTW Dev.	2					4		1			3	3	1	1		1		2		1	19
M-174	Information Dissemination	3		1	1		1					2	1						2	1		12
M-175	Text for Congressional Testimony	3		1	1		1					2	1						2			11
M-176	Speech Texts .	3		1	1		1					2	1						2			11
P-177	Magazine Articles	3		1	1		1					2	1						2			11
P-178	Newspaper Articles	3		1	1		1					2	1						2			11
P-179	News Releases	3		1	1		1					2	1						2			11

TABLE 4 Concluded.

Tasks Cited for Each Output Analyzed

Project Outputs		Clusters of Tasks (category code no. and label for coding set HO)																				
No.	Label	01 Clarifying problem addressed	02 Formulating objectives	03 Designing the output	04 Producing the output	05 Collecting/processing data	06 Assessing the output quality	07 Diffusing the output	21 Procuring professional staff	22 Effecting accountability	23 Procuring systems/services	24 Effecting quality control	25 Maintaining job satisfaction	26 Facilitating growth of staff	27 Enhancing physical environment	28 Maintaining equity among staff	29 Facilitating relationships	30 Effecting info. flow patterns	31 Diffusing info. within project	32 Diffusing info. beyond project	33 Effecting decision mechanisms	Output Totals
M-180	Intra- Ineragency Relationships	2	2		1					1							8	4	3	1	1	23
M-181	Provided and Maintained Adequate Research Staff						6															6
M-182	Relationships with Cities and Communities								2								1	1				4
P-183	Field Research Data (Collected)	3	2	3	4	12	1				1	3					1		2			32
M-184	Training of Production Staff									2		1	1	7		1						12
M-185	Storage and Handling System for Films and Video Tapes		1		2				2	4	2											11
M-186	Procurement of Technical Equipment and Facilities									3	6						1	1				11
M-187	Staffing of Production Development Department								15	1												16
M-188	Staffing of Production Dept.								2													2
M-189	Plan for Non-Broadcast Program	3	2	1						1	12			1				1			2	23
P-193	Sesame Street TV Programs			1					1	7		3	1	2								15
	Cluster Totals	51	15	41	34	15	38	7	35	68	87	65	70	19	12	1	19	17	40	10	17	661

TABLE 5

Enabling Knowledges Cited for Each Output Analyzed

Project Outputs		Primary Categories of Enabling Knowledges (category code no. and label for coding set S-1)																	
No.	Label	01 Standard school subjects	02 Subjects learned in courses	03 Subjects related to [illegible]	04 Technical/professional topics	05 Project focus topics, external	06 Project variables: external	07 Project operations: general	08 Project operations: specific	09 Scheduling and organizing	10 Staff status/responsibilities	11 Fiscal matters	12 Resources: personnel	18 Staff competencies/interests	19 Technical terminology/language	22 Use of equipment/systems	24 Process implementation	25 Sources of info/materials	Output Totals
P-011	Curriculum for Reading Program	2	1			1	1												5
P-031	Live Action Films for S.S. Shows				1														1
M-038	Budgets for CTW Operation				1		1					1					1		4
P-045	Writers' Notebook					1		2			1						1		5
M-047	Screening Critique of S.S.							2	2	1					2				7
P-048	Sound Tracks for Films and Animated Segments				2			1	2						1				6
M-049	Writers' Assignment Sheet								2										2
M-060	Distribution System for S.S. Magazine																	1	1
M-094	Dissemination of Research Info							1											1
M-108	Utilization Staff Welfare									1									1
P-119	Formative Goal Area Tests	1				1	1		1										4
M-131	Management of Production Personnel										1								1
M-150	Implementation of Feasible Budgeting				2														2
M-153	Adequate Staffing for Studio Production					1							1				1		3
M-154	Procurement of Funds for Cable TV Operation						2		1										3
M-155	Determination of Feasibility of TV Operation						2		1										3
M-156	Procurement of Staff for Cable TV Operation						2		1										3
M-161	Expansion of Distribution of CTW Products						2		1										3
M-162	Expansion of Availability of CTW Products						2		1										3
M-163	Procurement of Funds for Film-cassette Capability						2		1										3
M-164	Determination of Feasibility of Film-cassette Capability						2		1										3
M-165	Procurement of Staff for Film-cassette Capability						2		1										3
M-166	Procurement of Funds for Foreign Film Distribution						2		1										3
M-167	Determination of Feasibility of Foreign Film Distribution						2		1										3
M-168	Procurement of Staff for Foreign Film Distribution						2		1										3

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TABLE 5 Concluded.

Enabling Knowledges Cited for Each Output Analyzed

Project Outputs		Primary Categories of Enabling Knowledges (category code no. and label for coding set S-1)																	
No.	Label	01 Standard school subjects	02 Subjects learned in courses	03 Subjects related to MDD&E	04 Technical/professional topics	05 Project focus topics, external	06 Project variables: external	07 Project operation: general	08 Project operation: specific	09 Scheduling and organizing	10 Staff status/responsibilities	11 Fiscal matters	12 Resources: personnel	18 Staff competencies/interests	19 Technical terminology/language	22 Use of equipment/systems	24 Process implementation	25 Sources of info/materials	Output Totals
M-169	Procurement of Funds for New Studio in Mexico City						2		1										3
M-170	Determination Feasibility of New Studio in Mexico City						2		1										3
M-171	Procurement of Staff for New Studio in Mexico City						2		1										3
M-172	Organizational Management Structure				2	1	4		1										8
M-173	Planning for Future CTW				2	1	4		1										8
M-174	Information Dissemination				1		2							1					4
M-175	Text for Congressional Testimony				1		2							1					4
M-176	Speech Texts				1		2							1					4
P-177	Magazine Articles				1		2							1					4
P-178	Newspaper Articles				1		2							1					4
P-179	News Releases				1		2							1					4
M-180	Intra- Interagency Relationships									1									1
M-181	Provided and Maintained Adequate Research Staff						1				1								2
M-182	Relationships with Cities and Communities						6												6
P-183	Field Research Data (Collected)			3		1		1	1										6
M-184	Training of Production Staff										1						1		2
M-185	Storage and Handling System for Films and Video Tapes				1			1									2		4
M-186	Procurement of Technical Equipment & Facilities									1		1				1	1		4
M-187	Staffing of Production Development Department				1				1										2
M-189	Plan for Non-Broadcast Program				1	1	3											1	6
P-193	Sesame Street TV Programs					1		1	1								3		6
	Category Totals	3	1	3	19	9	61	9	25	5	2	4	1	6	1	1	10	2	164

Skills. Keeping in mind the management nature of the outputs analyzed, categories of skills cited suggest that persuasiveness and the ability to interact with others productively are critical skills. Aggregate linking of these skills to tasks cited and the standards held for their output illustrates the form of the persuasion and suggests the level of skill required. Planning and organizing, finding fits/integrating that which one observes, and assessing the potential skills of people are other categories of skills cited. These can be related to effecting the efficient production of quality work. The ability to adapt to various situations and demands was also noted. This skill is exercised in the contexts of working with children (for research purposes), budgeting demands, distribution and dissemination activity, and changing functional demands of overall operations.

Sensitivities. Sensitivity to values and needs of self and others are categories frequently cited by those interviewed. In addition, a sense of the capabilities and limitations of others is requisite. This was considered of particular importance in relation to making demands on others. An awareness of the frame of reference of those who were the target of various outputs is also seen as critical. When one relates this sensitivity to skills in persuasion, one can begin to identify the various interrelated elements utilized by CTW personnel to achieve their goals.

General. Knowledge of internal and external context situations, skills in assessing, persuading and interacting with others, and sensitivity to others and their frame of reference appear to be complementary sets of enablers. In terms of the major emphasis on standards of quality output and distribution, and the tasks relating thereto, these enablers appear to be supportive of the total operation of CTW. Detailed examination of Tables 5, 6, and 7 is invited to obtain information regarding other, less frequently cited categories.

Discussion of Output Data

The character of the data gathered by the interview team appears consistent with the impressions of the project and the philosophy of its management. If there is, indeed, a relationship between the actual production of quality products and the good feeling about CTW outputs among competent people who have had a hand in output production, then one can surmise quality products are being produced. It is worth noting that the activities of CTW range across research, development, diffusion, and evaluation, with a primary focus on diffusion. The nature of the data collected reflects this scope. In a very real sense, unique advantage can be taken of such data in that they illustrate one instance of a major, sincere effort to bring the tools of research, evaluation, and development to bear on a single, common diffusion objective. Thus, the data can be used in support of training for other similar efforts. In addition, it may provide a set of data which can be compared against other data reflecting more limited focal efforts; these affording an opportunity to better understand the interactions and effective utilization of RDD&E tools.

TABLE 6

Enabling Skills Cited for Each Output Analyzed

Project Outputs		Primary Categories of Enabling Skills (category code no. and label for coding set S-2)																										
No.	Label	01 Teaching	02 Facilitating people interacts.	06 Programming subject presen.	09 Analytical problems solving	11 Disciplining self	13 Listening	14 Writing	16 Using media	17 Interpreting language	18 Finding fits/integrating	19 Planning/conceptualizing	20 Exercising judgment	22 Estimating expenses/resources	23 Persuading/justifying	24 Explicating goals/procedures	25 Applying measurement tools	26 Locating/maintaining info.	27 Using equipment/systems	29 Getting others to perform	30 Adaptation to situation/demands	31 Taking another's perspective	33 Graphically illustrating	35 Communicating clearly	36 Cataloging/classifying	37 Assessing skills/potential	38 Using resources effectively	Output Totals
P-031	Live Action Films for S.S. Shows		1								1																	2
M-038	Budgets for CTW Operations												1	1			1	1			1	1						6
P-045	Writers' Notebook						1			1						1												3
M-047	Screening Critique of S.S.														1					1								2
M-049	Writers' Assignment Sheet							1											2						1			4
M-060	Distribution System for S.S. Magazine		3		1	1		1			1										1			1				9
M-094	Dissemination of Research Information											1									1							2
M-152	Overseeing of Production Activities for CTW					1					1																	2
M-153	Adequate Staffing for Studio Production		1								2					1										1		5
M-154	Procurement of Funds for Cable TV Operation														1													1
M-155	Determination of Feasibility of Cable TV Operation														1													1
M-156	Procurement of Staff for Cable TV Operation														1													1
M-161	Expansion of Distribution of CTW Products														1													1
M-162	Expansion of Availability of CTW Products														1													1
M-163	Procurement of Funds for Film-cassette Capability														1													1
M-164	Determination of Feasibility of Film-cassette Capability														1													1
M-165	Procurement of Staff for Film-cassette Capability														1													1
M-166	Procurement of Funds for Foreign Film Distribution														1													1
M-167	Determination of Feasibility of Foreign Film Distribution														1													1
M-168	Procurement of Staff for Foreign Film Distribution														1													1
M-169	Procurement of Funds for New Studio in Mexico City														1													1
M-170	Determination of Feasibility of New Studio in Mexico City														1													1

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TABLE 6 Concluded.

Enabling Skills Cited for Each Output Analyzed

Project Outputs		Primary Categories of Enabling Skills (category code no. and label for coding set S-2)																									
No.	Label	01 Teaching	02 Facilitating people interactn.	06 Programming subject presen.	09 Analytical problems solving	11 Disciplining self	13 Listening	14 Writing	16 Using media	17 Interpreting language	18 Finding fits/integrating	19 Planning/conceptualizing	20 Exercising judgment	22 Estimating expenses/resources	23 Persuading/justifying	24 Explicating goals/procedures	25 Applying measurement tools	26 Locating/maintaining info.	27 Using equipment/systems	29 Getting others to perform	30 Adaptation to situation/demands	31 Taking another's perspective	33 Graphically illustrating	35 Communicating clearly	36 Cataloging/classifying	37 Assessing skills/potential	38 Using resources effectively	Output Totals
M-171	Procurement of Staff for New Studio in Mexico City														1													1
M-172	Organizational Management Structure															1				1								2
M-173	Planning for Future CTW Development															1				1								2
M-174	Information Dissemination							1			1																	2
M-175	Text for Congressional Testimony							1			1																	2
M-176	Speech Texts							1			1																	2
P-177	Magazine Articles							1			1																	2
P-178	Newspaper Articles							1			1																	2
P-179	News Releases							1			1																	2
M-180	Intra- Interagency Relationships		1																									1
M-181	Provided and Maintained Adequate Research Staff											1																1
M-182	Relationships with Cities and Communities		4																									4
P-183	Field Research Data (Collected)		1									1	1		1		1				1							6
M-184	Training of Production Staff	3																								2		5
M-185	Storage and Handling System Films and Video Tapes	1										1																2
M-186	Procurement of Technical Equipment and Facilities													1	1			1			1							4
M-189	Plan for Non-Broadcast Programs		1	1																			1					3
P-193	S.S. Television Programs											1								1	1						1	4
	Category Totals	4	12	1	1	2	1	7	1	1	11	5	2	2	17	4	2	2	2	4	6	1	1	1	1	3	1	95

TABLE 7

Enabling Sensitivities Cited for Each Output Analyzed

Project Outputs		Primary Categories of Enabling Sensitivities (category code no. and label for coding set S-3)																									
No.	Label	01 Values of self & others	02 Capabilities and limitations	03 Needs of self & others	04 Content of subject matter	06 Worth in disciplines/methods	10 Awareness of structure	11 Awareness of method	16 Existing value systems	17 Personality of others	18 Potential conflict of interest	19 Supportiveness required	20 Unstated obligations	21 Limitation of analysis/data	23 Cost/benefit factors	25 Individual differences	26 Recognition of data needs	27 Acceptability of output	29 Willingness to experiment	30 Response sets of tgt audiences	31 Nature/scope of outputs	32 Reality in spending	33 Need for excellence in work	34 Willingness to take guidance	35 Need to communicate effectively	36 Feeling of personal security	37 Willingness to delegate	Output Totals
P-031	Live Action Films for S.S. Shows								1									1										2
M-038	Budgets for CTW Operations														1							2						3
P-045	Writers' Notebook		1						1																			2
M-047	Screening Critique of S.S.				1							1																2
P-048	Sound Tracks for Films and Animated Segments	1	1							1																		3
M-049	Writers' Assignment Sheets				1																							1
M-060	Distribution System for S.S. Magazine				1	1																						2
M-094	Dissemination of Research Information			1																								1
M-108	Utilization Staff Welfare	2		1							1		1						1							1		7
M-150	Implementation of Flexible Budgeting			1																			1					2
M-152	Overseeing of Production Activities for CTW		1	1				1																				3
M-153	Adequate Staffing for Studio Production			1					1	1																		3
M-154	Procurement of Funds for Cable TV Operation																			1								1
M-155	Determination of Feasibility of Cable TV Operation																			1								1
M-156	Procurement of Staff for Cable TV Operation																			1								1
M-161	Expansion of Distribution of CTW Products																			1								1
M-162	Expansion of Availability of CTW Products																			1								1
M-163	Procurement of Funds for Film-cassette Capability																			1								1
M-164	Determination of Feasibility of Film-cassette Capability																			1								1
M-165	Procurement of Staff for Film-cassette Capability																			1								1
M-166	Procurement of Funds for Foreign Film Distribution																			1								1
M-167	Determination of Feasibility of Foreign Film Distribution																			1								1

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TABLE 7 Concluded.

Enabling Sensitivities Cited for Each Output Analyzed

Project Outputs		Primary Categories of Enabling Sensitivities (category code no. and label for coding set S-3)																									
No.	Label	01 Values of self & others	02 Capabilities and limitations	03 Needs of self & others	04 Context of subject matter	06 Worth in disciplines/methods	10 Awareness of structure	11 Awareness of method	16 Existing value systems	17 Personality of others	18 Potential conflict of interest	19 Supportiveness required	20 Unstated obligations	21 Limitation of analysis/data	23 Cost/benefit factors	25 Individual differences	26 Recognition of data needs	27 Acceptability of output	29 Willingness to experiment	30 Response sets of tgt audiences	31 Nature/scope of outputs	32 Reality in spending	33 Need for excellence in work	34 Willingness to take guidance	35 Need to communicate effectively	36 Feeling of personal security	37 Willingness to delegate	Output Totals
M-168	Procurement of Staff for Foreign Film Distribution																			1								1
M-169	Procurement of Funds for New Studio in Mexico City																			1								1
M-170	Determination of Feasibility of New Studio in Mexico City																			1								1
M-171	Procurement of Staff for New Studio in Mexico City																			1								1
M-172	Organizational Management Structure									1																		1
M-173	Planning for Future CTW Development		1																									1
M-174	Information Dissemination		1																									1
M-175	Text for Congressional Testimony		1																									1
M-176	Speech Texts		1																									1
P-177	Magazine Articles		1																									1
P-178	News Articles		1																									1
P-179	News Releases		1																									1
M-180	Intra- Interagency Relationships			1								1												1	1			4
M-181	Provided and Maintained Adequate Research Staff																								1			1
M-182	Relationships with Cities and Communities	1		1	1		1		2																		1	7
P-183	Field Research Data (Collected)													1			1			1	1							4
M-184	Training of Production Staff	1		1																			1					3
M-185	Storage and Handling System for Films and Video Tapes		1																									1
M-186	Procurement of Technical Equipment and Facilities											1																1
M-187	Staffing of Production Development Department															1												1
M-189	Plan for Non-Broadcast Program	2			1				1											1								5
P-193	Sesame Street TV Program		1															1										2
	Category Totals	7	11	8	5	1	1	1	6	4	1	3	1	1	1	1	1	2	1	16	1	2	2	1	2	1	1	82

Chapter IV: Supplementary Data

Additional data with respect to this site visit comes from questionnaire techniques as well as from a first ordering of classes of outputs. A presentation of the distribution of outputs across R, D, D, & E follows, after which is a brief discussion of the backgrounds of personnel (described through questionnaire data), the support services required, and a comment on CTW's financial base.

Classification of the Outputs

The following are classifications of the CTW outputs identified by the interviewers according to primary focus as research, development, diffusion, or evaluation effort.

As shown in Tables 8 and 9, of the 205 outputs identified by the interviewers, five are classified as being "research" in focus, 104 as "development," 70 as "diffusion," and 26 as "evaluation." The project itself is considered a "diffusion project." AT the time of the interview team's visit, 57 outputs were completed, 41 were currently in progress, 19 had not yet been undertaken, and 88 were ongoing.

TABLE 8
Classification of Products by Focus and Stage of Completion

	Status of Outputs				
Output Focus	Completed	Currently in Progress	Not Yet Underway	Ongoing	TOTALS
Research	3	1	0	1	5
Development	16	13	6	16	51
Diffusion	13	13	9	10	45
Evaluation	7	4	0	5	16
TOTALS	39	31	15	32	117

TABLE 9
Classification of Management Outputs
by Focus and Stage of Completion

	Status of Outputs				
Output Focus	Completed	Currently in Progress	Not Yet Underway	Ongoing	TOTALS
Research	0	0	0	0	0
Development	15	2	3	33	53
Diffusion	1	5	1	18	25
Evaluation	2	3	0	5	10
TOTALS	18	10	4	56	88

CTW, as a project, must be regarded differently from the others studied in the efforts of the Oregon Studies to obtain information about exemplary educational research, development, diffusion, and evaluation projects. Although there are business elements present in most RDD&E projects, the corporate nature of CTW distinguishes it from projects which are operated by traditional educational agencies.

The central purpose of the Workshop is to prepare preschool children for school. Accordingly, the efforts of CTW's staff are directed toward the development of techniques and materials which can be utilized by the largest number of preschoolers, in particular the disadvantaged, that can be reached through the medium of television.

Academic Backgrounds of Project Personnel

Since data concerning the academic and professional backgrounds of only one-third of the interviewees were obtained, the general remarks which follow only provide hints about the kinds of preparation that CTW personnel had before their present employment. As noted by the Director of Development, however, there are some similarities among the key persons in the organization. For one thing, the top managers are almost all in the 35-39 age bracket. Their lieutenants tend to be in the 25-29 age group.

Another generalization offered by the Director of Development was that degrees just do not mean much in the television industry. Inasmuch as the reverse is still true in the education field, one would guess that professsionals from the television industry on the staff would have a bachelor's degree or less academic preparation and that people working in the Research Department would hold higher degrees. This hypothesis is supported at least in part by the partial data: the only doctorate among the personnel is held by the Director of Research (and one of his staff members expects to obtain a Ph.D. soon). All of the other department heads from whom data were obtained have bachelor's degrees. Incidentally, the Executive Producer believes that television professionals who are over 40 are less likely to have degrees than younger persons in the field. During the early stages of television, it was far more important to gain experience in the studio than it was to study the medium or an allied medium in college.

The degrees possessed by the six persons for whom this type of background was collected tend to be of two kinds: research oriented (educational research, statistics-measurement/psychology, and psycholinguistics) and humanities oriented (English, philosophy, and fine arts).

Professionalism of the Interviewees

Impressions of the professional qualities of CTW's staff might be ranked in this manner:

1. The willingness to put aside self-ingratiation and to work for a common set of goals and objectives.
2. An understanding of the goals and objectives of the Workshop.
3. An understanding of what was contributed individually to facilitate the attainment of the stated goals and objectives.
4. A commitment as individuals to implement the goals and objectives of the Workshop.
5. An ability to be thrilled and excited by the possibility of modifying underprivileged children's behavior by producing the products of the Workshop.
6. A demonstrated ability to do that task which they have been assigned to do.
7. A degree of professionalism which comes only by way of years of experience.

CTW avails itself of a wide variety of equipment and services to generate its products, among which the highly critical items are:

mechanical and electrical equipment.
printing facilities.
television graphics.
all types of photography equipment and services.
technical writing.

typing.
secretarial services. (other than typing)
editing.
technical and professional journals and other documents not locally available.

computer analysis services.
statistical consultation.
audio-visual aids and devices.
subjects for experimentation.
travel arrangements.

budgetary and fiscal accounting.
scoring of test items.

Funding

In spite of the generous support given CTW in its creation, funding is a continual focus of effort. The project was begun with funding in the amount of eight millions during the first two years of its existence. In 1970-71, more was needed, and in 1972 additional dollars will be needed for broadcasting alone. The principal sources of support now are the Department of Health, Education and Welfare; Ford Foundation; Carnegie Corporation; and the Corporation for Public Broadcasting.

Classifications of Output Characteristics

As the Oregon Studies evolved it became evident that outputs could be categorized in terms of a number of varialbes. Among them are (a) Structure (product, event, or condition), (b) Function (policy setting, management, or production), (c) Level (focal, component, or facilitating), (d) Character (knowledge, technology, implementation, or information), and (e) Stage of Completion. These five schema are represented in Table 10 for each project output identified, with frequencies summarized for each category. Table 10 has been added to this profile subsequent to the profile's original writing.

TABLE 10

Classifications of Output Characteristics

Project Outputs		Output Characteristic[a]																		
		Structure			Function			Level			Character (Products Only)				Completion Stage					
No.	Label	p	e	c	ps	m	p	f_1	c	f_2	k	t	i_1	i_2	1	2	3	4	5	6
P-01	Television Reading Program	X					X	X					X					X		
P-02	Animated Films for Reading Program	X					X		X			X						X		
P-03	Live Action Films for Reading Programs	X					X		X			X						X		
P-04	Video Tape-Studio Bits for Sesame Street Program	X					X		X			X								X
*P-05	Assembled Scripts for Reading Program	X					X			X		X						X		
P-06	Serialized Adventure Scripts	X					X			X		X							X	
P-07	Serialized Stories Manuscripts	X					X			X		X							X	
P-08	Reading Program Magazine	X					X	X					X						X	
P-09	Reading Program - Teacher Guide	X					X			X		X							X	
P-10	Reading Program - Parent Guide	X					X			X		X							X	
*P-11	Curriculum for Reading Program	X					X			X		X						X		
P-12	Reference Manual: Survey of Classroom Instruction Systems for Reading	X				X				X				X		X				
P-13	Story Boards for Animated Films	X					X			X		X						X		
P-14	Time-Life Book (5 titles) - Related to Sesame Street	X					X			X			X			X				
P-15	Time-Life Paperback Reprints - Related to Sesame Street	X					X			X			X			X				
P-16	Cast Record Album - Year #1	X					X		X				X			X				
P-17	45 R.P.M. Record and Song Folio	X					X		X				X			X				
P-18	Sesame Street Records - Songs (Not Officially Authorized by C.T.W.)	X					X			X			X			X				
P-19	Subcontracted Film Strips Related to Sesame Street	X					X			X			X		X					
P-20	Sesame Street Magazine	X					X	X					X							X
M-21	Adequate Operational Supplies for Filming Television Shows			X		X				X										X
M-22	Provision of T.V. Studio Equipment		X			X				X										X
M-23	Informal Financial Reports	X				X				X										X
M-24	Formal Financial Reports	X				X				X										X
M-25	Production Commitment Forms (Internal Request Forms)	X				X				X					X					
M-26	Purchase Orders for T.V. Production Equipment and Supplies	X				X				X										X
M-27	Daily Log of Encumbrances	X				X				X										X
M-28	Personal Contracts for Subcontracted Work (T.V. Production)	X				X				X										X
M-29	Space/Facilities Contracts for T.V. Production	X				X				X					X					
P-30	Inserts for Sesame Street Shows	X					X		X			X								X
*P-31	Live Action Films for Sesame Street Shows	X					X		X			X								X
P-32	Animated Films for Sesame Street Shows	X					X		X			X								X
P-33	Film Book-Index of Film for Sesame Street	X				X				X		X								X
P-34	Assembled Scripts for Sesame Street	X					X			X		X								X
P-35	Curriculum for Sesame Street	X					X			X		X								X

TABLE 10 Continued

Classifications of Output Characteristics

Project Outputs		Output Characteristic[a]																			
		Structure			Function			Level			Character (Products only)				Completion Stage						
No.	Label	p	e	c	pa	m	p	f1	c	f2	k	r	i1	i2	1	2	3	4	5	6
P-36	Video Tapes of Completed Sesame Street Programs	X					X	X				X				X				
P-37	Masters of Completed Sesame Street Programs	X					X	X				X				X				
*M-38	Budgets for CTW Operations	X				X				X										X
M-40	Schedule of Delivery Services for Distribution of Tapes	X				X				X										X
M-41	Specifications for Production Facilities	X				X				X					X					
M-42	Specifications for Production - Broadcasting Crew	X				X				X					X					
M-43	Weekly Schedule of Television Production	X				X				X										X
M-44	Monthly Schedule of Television Production	X				X				X										X
*P-45	Writers Notebook	X					X			X		X								X
M-46	Distribution Schedule for Sesame Street Shows	X				X				X										X
*M-47	Screening Critique of Sesame Street		X			X				X										X
*P-48	Sound Tracks for Films and Animated Segments	X					X		X			X								X
*M-49	Writers Assignment Sheets	X				X				X										X
P-50	ETS Evaluation Reports	X				X				X				X		X				
P-51	Internal Newsletter: "Scope"	X				X				X			X							X
P-52	Video Tapes for Training Films - Concepts for Teachers and Principals	X					X			X		X				X				
P-53	Training Program for Utilization Coordinators	X				X				X		X				X				
P-54	Demonstration Program for Follow-up Activities for Sesame Street	X					X			X		X				X				
P-55	Films on Sesame Street Objectives for Parents	X					X			X		X				X				
P-56	Films on Sesame Street Objectives for Paraprofessionals	X				X				X		X				X				
P-57	Films on Sesame Street Objectives for Teachers	X					X			X		X				X				
P-58	Operations Manual for Utilization Center Offices	X				X				X		X				X				
M-59	Acquisition of Facilities for Utilization Offices		X			X				X										X
*M-60	Distribution System for Sesame Street Magazine	X				X				X						X				
M-61	Facilitation of Broadcast Reception			X			X			X										X
M-62	Acquisition of Equipment and Facilities for Viewing Centers		X			X				X										X
M-63	Staffing for Viewing Centers (Lay Personnel)		X			X				X										X
P-64	Community Resource Directory	X				X				X				X				X		
P-65	Sesame Street Magazine - Spanish Language Version	X					X		X				X							X
P-66	Guidelines for Helping Communities Utilize Sesame Street	X				X				X		X				X				
P-67	Guidelines for Interacting with Community/Neighborhood	X				X				X		X				X				

TABLE 10 continued

Classifications of Output Characteristics

Project Outputs		Output Characteristic^a																		
		Structure			Function			Level			Character (Products only)				Completion Stage					
No.	Label	p	e	c	pa	m	p	f_1	c	f_2	k	t	i_1	i_2	1	2	3	4	5	6
M-68	Cautions Regarding CTW's Relationships to Early Childhood Education Field	X			X					X						X				
P-69	Demographic Data on Communities/ Neighborhoods	X				X				X				X				X		
P-70	Broadcast Reception Data	X				X				X				X						X
P-71	Community Resource Data	X				X				X				X						X
P-72	Utilization Program Impact Data	X				X				X				X						X
P-73	Data on Kind and Type of Preschool Activities Being Conducted Currently	X				X				X				X						X
P-74	Operational Support Systems (Linkage to Childhood Care Centers, N.Y.C., etc.)			X		X				X		X								X
P-75	Community Workshops for Parents, Teachers, and Administrators for Utilizing Sesame Street		X				X			X			X							X
P-76	Bilingual Program Project	X					X	X					X				X			
P-77	Spanish Language Materials for Preschool Teachers	X					X			X		X						X		
P-78	Spanish Language Materials for Parents	X					X			X		X						X		
P-79	Spanish Language Activities for Preschool Teachers	X					X			X		X						X		
P-80	Spanish Language Activities for Parents	X					X			X		X						X		
P-81	Teacher-Conducted Workshops for Spanish Paraprofessionals		X			X			X			X							X	
P-82	Special Project: Training Program for N.Y.C. Enrollees	X				X			X			X							X	
P-83	Audio Tapes for Reading Program for Viewing Center Use	X					X		X			X							X	
P-84	Allied Printed Materials for Reading Program	X					X		X			X							X	
M-85	Acquisition of Television Sets for Viewing Centers		X				X			X										X
M-86	Consulting Services for School Generated Projects			X		X				X										X
P-87	Pilot Films of Reading Program for University Media Center	X					X			X		X						X		
P-88	Survey and Order Form: ETV Stations (for Magazine Distribution)	X				X				X		X				X				
P-89	Confirmed List of Distributing Agencies for Sesame Street Magazines	X					X		X			X				X				
P-90	List of Vista Volunteers	X					X		X					X		X				
P-91	Magazine Mailing List	X					X		X			X				X				
P-92	Solicited Letters from Boards of Education on Needs for CTW Products	X				X				X				X		X				
M-93	Description of Distribution Depots	X				X				X						X				
*M-94	Dissemination of Research Information		X			X				X										X
P-95	Battery of Language and Reading Level Tests	X					X			X		X						X		
P-96	Normative Data on Inner-City Four-Year Olds	X					X			X				X		X				
P-97	Data on Program Appeal	X					X			X				X						X
M-98	Reviews of Sesame Street Program Scripts	X								X										X
M-99	Researcher Training (OJT)		X			X				X										X

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TABLE 10 Continued

Classifications of Output Characteristics

Project Outputs		Output Characteristic[a]																		
		Structure			Function			Level			Character (Products only)				Completion Stage					
No.	Label	p	e	c	p*	m	p	f_1	c	f_2	k	r	i_1	i_2	1	2	3	4	5	6
M-100	Tracking of Testing Relative to Sesame Street		X			X				X										X
P-101	Memos on Instrumention	X				X				X		X								X
P-102	Final Reports to Funding Agencies	X				X		X					X							X
P-103	Professional Publication Articles	X					X			X			X							X
M-104	Intra-agency Coordination			X		X				X										X
M-105	Inter-agency Coordination			X		X				X										X
P-106	ETS Schievement Data	X					X			X				X		X				
P-107	Teaching Research Data on Social Interaction	X					X			X				X				X		
*M-108	Staff Welfare			X		X				X										X
P-109	Description of Target Audience	X					X			X				X	X					
M-110	Adequate In-House Communications			X		X				X										X
M-111	Staffing Policy for Research Department	X			X					X					X					
M-112	Coordinated Field Research			X		X				X										X
P-113	Format for Reading Program Research	X				X				X		X				X				
P-114	List of Stimulus Variables to be Studied	X				X				X		X				X				
P-115	Child Observation System	X				X				X		X				X				
P-116	Sight Vocabulary List	X					X			X				X		X				
P-117	Tests for Comprehended Language Level	X					X			X		X				X				
P-118	Test Item Analysis Data	X					X			X				X				X		
*P-119	Formative Goal Area Tests	X					X			X		X						X		
P-120	Statement of Problem/Goal Areas for Research	X			X					X		X								X
	Seminars on Problem/Goal Areas		X		X					X										X
P-122	Data on Pre-reading Skills	X				X				X				X				X		
*M-123	Speeches to Outside Groups on CTW's Operations		X				X		X											X
*P-124	Promotional Film for Reading Program	X					X			X			X			X				
*P-125	Progress Reports to U.S.O.E. (Every 3 months)	X				X		X						X						X
M-126	Contract with Commercial Television Stations	X				X				X					X					
P-127	Final Report (Research)	X					X	X			X					X				
P-128	Research Publication (ETS) - Commercial Version	X					X			X			X			X				
P-129	Catalog of Available Program Material	X				X				X		X				X				
P-130	Activity Books/Punch-out, Stick-on, Simple Puzzle Books)	X					X		X				X					X		
*M-131	Management of Production Personnel			X		X				X										X
P-132	Sesame Street Pop-Up Books (4)	X					X		X				X					X		
P-133	Sesame Street Story Book (1)	X					X		X				X					X		
P-134	Sesame Street Puppets	X					X		X				X					X		
P-135	Beginning Readers: Bright and Early Series	X					X		X				X						X	

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TABLE 10 Continued

Classifications of Output Characteristics

Project Outputs		Output Characteristic[a]																		
		Structure			Function			Level			Character (Products only)				Completion Stage					
No.	Label	p	e	c	ps	m	p	f_1	c	f_2	k	t	i_1	i_2	1	2	3	4	5	6
P-136	Sesame Street Song Book	X					X		X				X					X		
P-137	Books (2) by Famous Illustrator-Author	X					X		X				X					X		
P-138	Sesame Street - Inspired Toys	X					X		X				X						X	
P-139	Sesame Street - Inspired Games	X					X		X				X						X	
P-140	Cast Record Album - Year #2	X					X		X				X					X		
P-141	Recorded Songs from Sesame Street	X					X		X				X					X		
P-142	Educational Greeting Cards Inspired by Sesame Street	X					X		X				X						X	
P-143	Comic Strip Inspired by Sesame Street	X					X		X				X						X	
P-144	Guidelines for Helping Communities Utilize Reading Program	X				X				X		X						X		
M-145	Speeches to Outside Groups about Reading Program		X				X			X										X
*M-146	Relationships with Public Television Network			X		X				X										X
*M-147	Relationships with Commercial Television Networks			X		X				X										X
*M-148	Formulation of Policy for CTW		X		X					X										X
*M-149	Solicitation of Funds for CTW		X			X				X										X
*M-150	Implementation of Flexible Budgeting		X			X				X								X		
*M-151	Monitored Operations for Consistency of Philosophy			X		X				X										X
*M-152	Overseeing of Production Activities for CTW		X			X				X										X
*M-153	Adequate Staffing for Studio Production			X		X				X										X
*M-154	Procurement of Funds for Cable Television Operations		X			X				X								X		
*M-155	Determination of Feasibility of Cable Television Operation		X		X					X								X		
*M-156	Procurement of Staff for Cable Television Operation		X			X				X								X		
*M-157	Procurement of Funds for International Television Operations		X			X				X								X		
*M-158	Determination of Feasibility of International Television Operations		X		X					X								X		
*M-159	Procurement of Staff for International Television Operations		X			X				X									X	
*M-160	Maintained Atmosphere in which People Feel Effective			X		X				X										X
*M-161	Expansion of Distribution of CTW Products		X			X		X												X
*M-162	Expansion of Availability of CTW Products		X			X		X												X
*M-163	Procurement of Funds for Film-Cassette Capability		X			X				X									X	
*M-164	Determination of Feasibility of Film-Cassette Capability		X		X					X								X		
*M-165	Procurement of Staff for Film-Cassette Capability		X			X				X									X	
*M-166	Procurement of Funds for Foreign Film Distribution		X			X				X								X		

TABLE 10 continued

Classifications of Output Characteristics

Project Outputs		Output Characteristic*																		
		Structure			Function			Level			Character (Products only)				Completion Stage					
No.	Label	p	e	c	ps	m	p	f_1	c	f_2	k	t	i_1	i_2	1	2	3	4	5	6
*M-167	Determination of Feasibility of Foreign Film Distribution		X		X					X						X				
*M-168	Procurement of Staff for Foreign Film Distribution		X			X				X						X				
*M-169	Procurement of Funds for New Studio in Mexico City		X			X				X								X		
*M-170	Determination of Feasibility of New Studio in Mexico City		X		X					X						X				
*M-171	Procurement of Staff for New Studio in Mexico City		X			X				X									X	
*M-172	Organizational Management Structure			X	X					X										X
*M-173	Planning for Future CTW Development		X		X			X												X
*M-174	Information Dissemination		X			X		X												X
*M-175	Text for Congressional Testimony	X					X			X						X				
*M-176	Speech Texts	X					X			X										X
*P-177	Magazine Articles	X					X			X			X							X
*P-178	Newspaper Articles	X					X			X			X							X
*P-179	News Releases	X					X			X			X							X
*M-180	Intra-Inter Agency Relationships			X		X		X												X
*M-181	Provided and Maintained Adequate Research Staff			X		X				X										X
*M-182	Relationships with Cities and Communities			X		X				X								X		
*P-183	Field Research Data (Collected)	X				X		X			X					X				
*M-184	Training of Production Staff		X			X				X										X
*M-185	Storage and Handling System for Films and Video Tapes	X				X				X					X					
*M-186	Procurement of Technical Equipment and Facilities		X			X				X					X					
*M-187	Staffing of Production Development Department		X			X				X										X
*M-188	Staffing of Production Department (Other Than Studio)		X			X				X										X
*M-189	Plan for Non-Broadcast Program	X				X				X						X				
P-190	Sesame Street Calendar	X					X		X				X						X	
P-191	Television Viewing Center for Children	X					X			X	X							X		
P-192	Inner City Utilization Offices	X				X		X					X					X		
*P-193	Sesame Street Television Programs	X					X	X					X						X	
P-194	Filmed Segments for Reading Program	X					X		X		X									X
M-195	Writers Assignment Sheets for Reading Program	X				X				X										X
P-196	Writers Notebook for Reading Program	X					X			X	X							X		
P-197	Film Book for Reading Program	X				X				X	X							X		
P-198	Time-Life Learning Kit (Sesame Street)	X					X			X			X			X				

TABLE 10 Concluded

Classifications of Output Characteristics

Project Outputs		Output Characteristic[a]																		
		Structure			Function			Level			Character (Products only)				Completion Stage					
No.	Label	p	e	c	ps	m	p	f_1	c	f_2	k	t	i_1	i_2	1	2	3	4	5	6
P-199	Sesame Street Magazine (Year 2)	X					X	X					X							X
P-200	Sesame Street Magazine - Spanish Version (Year 2)	X					X	X					X							X
M-201	Writer's Workshop		X			X				X										X
M-202	Selected and Trained Writers			X		X				X										X
P-203	Tape File of all Bits, Segments, and Inserts for Sesame Street	X				X				X		X								X
P-204	Final Script for Sesame Street	X					X			X		X								X
M-205	Annual Production Schedule for Sesame Street	X				X				X						X				
M-208	Goals from Proposal	X			X					X						X				
Classification Frequencies[b]		143	42	20	13	102	90	19	33	153	2	58	39	19	10	46	1	41	20	87

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[a] The specific output characteristics are identified as follows:

Structure

p - product
e - event
c - condition

Function

ps - policy setting
m - management
p - production

Level

f_1 - focal
c - component
f_2 - facilitating

Character

k - knowledge
t - technology
i_1 - implementation
i_2 - information

Completion Stage

1 - completed over one year ago
2 - completed 3 to 12 months ago
3 - completed within last 3 months
4 - currently in progress
5 - not yet underway
6 - on going (continuous)

[b] Data totals in this table may vary slightly from data in tables reported elsewhere. This is a function of decision rules governing classification of outputs having been revised and applied to these data subsequent to the preparation of the profile.

Chapter V: Project Dynamics

This chapter deals with CTW's staffing patterns, management structure, management styles, emotional-social environment, relationships with sponsoring agencies, and staff backgrounds.

Interrelationships

Although a multiplicity of reports, articles, etc. have been written about CTW and uncounted numbers of persons have tracked through the CTW offices, reading those reports and speaking with prior visitors somehow did not prepare the Oregon Studies' site team for its visit. From the receptionist at the front desk to the President of the corporation, the visitor is impressed with the "something different" which surrounds the organization. While the achievements of the organization might be attributed to any number of factors, what follows is discussion of a number of interrelationships considered to be somewhat unique in the television industry, and possibly contributory to CTW's achievements.

Interrelationships Among President and Staff

In a sense, CTW is the product of a single person--its President. She believed that in television lay the answer to many of the very serious problems of getting children ready to learn in school. As the original proposal put it, "there may be a shortage of classrooms, but there is no shortage of televison sets." Because of the availability and appeal of the medium, a target audience was assured. On the other hand the effectiveness of educational television was seen as limited, especially in disadvantaged homes. Her solution was to utilize the techniques of commercial television. Accordingly she set out to get the "best people in the business" to join her when her proposal for a Children's Television Workshop was funded. The people she hired were almost all from commercial television. The belief is apparently shared by all who are associated with it that the people who have jobs in the organization are the best in their fields. The President's mode of managing can be characterized as finding and hiring outstanding people and then giving them her full support to perform as effectively as they can.

The communication flow at all levels and between levels is rapid, informal, and frequent. The President communicates regularly with top-level management people and the Chairman of the Board of Trustees. She interacts on a regular basis with her "chief lieutenants" (vice presidents, managers, and department heads) and with the staff of the Non-Broadcast Department. In addition, she interacts regularly with several key people such as the Director of Development, the Executive Producer, and the principal educational consultant of the Workshop. The relationships established with these people appear to be informal and characterized by mutual respect. The President hired most of the key people of the Corporation, but she took the word of people in the industry about one or two. She is not involved directly in hiring personnel below the managerial level; she is informed about important appointments and promotions, however.

This executive believes in delegating authority--"the only way to run an organization like this." Her staff attests to the implementation of this policy, and they seem to thrive in an environment of challenges and relative autonomy. The interviewing team was not able to determine how often (or if ever) the President issues memoranda, but there probably is a minimum of this kind of interaction and an emphasis put upon communication of a head-to-head kind when problems occur and/or when decisions must be made.

Interrelationships Among Corporation Personnel

The Director of Development has assumed the role of making certain that policy is observed by the various departments. He does not seem to be a policymaker, however (although he is a member of "watchdog of policy." He issues memoranda concerning matters effecting personnel and convenes groups in order to clarify policy matters. The personnel of the Workshop are located in five buildings, and so there tends to be some "clustering" of communication within buildings (or floors of buildings); but the interviewers did not see that there was any real problem in the staff's communicating with one another, whether or not they were in different buildings. The studio people (actors, studio producers, technicians, etc.) are probably more removed from the management personnel in terms of regular interaction because their activities are centered in the studio, some 20 blocks away. The personnel of the various departments enjoy congenial and productive working relationships with members of other departments. This is considered essential at CTW inasmuch as departments depend upon and seek out information from each other.

Perhaps one of the salient features of the organization is that deserving people are promoted rather rapidly. This is partly the result of the nature of the business; that is, in television many people learn parts of their future jobs by first assuming lesser roles. This on-the-job training is a recognized characteristic of the industry; in fact, producers can only become producers by serving a quasi-apprenticeship, and specific university training evidently does not preclude this necessity.

Morale appears to be high in the organization because of the job opportunities available to talented and hard-working persons and because people have opportunities to express their talents and are not interfered with unduly. Salaries are generally below those paid in commercial television, but the Workshop recently had a survey made to compare salaries for CTW personnel with those in the rest of the (commercial) television industry. No one expects that the salaries of CTW personnel will reach industry levels because a certain amount of self-sacrifice is expected of individuals who are dedicated to what is felt to be a rather noble cause, and also because the Workshop is not a profit-making organization.

Interrelationships of Management Personnel with Consultants

The principal consultant to the Workshop is a Harvard professor of child development who this year is on leave of absence. He communicates by telephone with the President, the vice president in charge of research, and others regularly; and he often visits CTW's offices. In addition, he calls in other consultants when the occasion demands. He is paid a fee by the corporation, as are other consultants when their services are required.

Interrelationships Among CTW and Funding Agencies

CTW was initially funded by USOE to the extent of about one-half of its budget. The same is true now. The balance of the funding comes from a variety of sources: Carnegie Corporation, Ford Foundation (Education Department), and the Public Broadcasting System provide general funds; Mobil Oil Corporation (for the Sesame Street Magazine), Xerox Corporation (for the broadcasting of the program which was previewed on commercial stations), and Southern New Jersey State with USOE (for the Spanish version of the magazine) provide targeted funds.

Quarterly reports are sent to USOE, and copies of these reports are submitted to the various other funding agencies. At present the Director of Development is charged with the responsibility of writing and submitting these reports.

Interrelationships Among the Corporation and Outside Industries

CTW has engaged in an ambitious campaign to (a) extend the influence of the Workshop in educating preschool children through the media of books, records, puzzles, etc. and (b) to improve its financial position as a result of its affiliation with many private corporations who are eager to vend the products which CTW wishes to endorse. CTW's relationships with the publishing industry, as a case in point, are most interesting. Because the books that were produced by one publisher were thought to be too expensive to reach the majority of children who would most benefit by reading them, CTW has been negotiating with a number of other publishers to produce inexpensive books that will be much more within the purchasing power of inner city families. The Corporation is adamant in insisting that the content and the price of the products which bear the "Sesame Street" name are approved by CTW before they are made available to the public. Much of the ideation for the puzzles, games, calendars, books, film strips, etc. is to come directly from the personnel at CTW. All of it must be approved by the CTW management.

Support Services

Support services seem to be very good in all departments. The policy appears to be to subcontract all services outside of a core of support services (secretarial, clerical, mailing, etc.) within CTW. This is probably done to avoid an overload of long-term retention of services that may only be needed periodically. Then too, because of the location of CTW in Manhattan, a variety of short-term services are readily available to the Workshop.

In summary, an attempt has been made to describe CTW in terms of a number of organizational and personnel factors which seemed to contribute most obviously to the dynamic impression one has of the organization as a whole. The description is accurate and reasonably complete when taken in relation to the data obtained. Unfortunately, it may be that a clear appreciation of that description cannot be attained without also having seen CTW in operation on a first-hand basis. The words used are not unlike those describing other projects. However, when one views the operations in the present instance there is a uniqueness sensed that distinguishes this organization from others. It seems appropriate, therefore, to make comment on this dynamic.

The consensus of the interview team identified the following distinguishing features as having been integrated and operationalized. Briefly:

1. Workshop direction is clearly stated.

2. Workshop direction is shared and implemented by all staff members.

3. The activities engaged in are obviously and publicly leading to and facilitating the achievement of the stated goal.

4. Staff members understand the goals and their implications, and daily act upon them.

5. The competence of staff, coupled with a sharing of the same sense of direction and commitment, permits an informality which maximizes effective communication, particularly in planning and designing activities.

6. CTW management has demonstrated its ability to clearly state the goal, explicate and understand the tasks inherent in achieving those goals, and to employ those capable of carrying out those tasks with a large measure of expertise.

7. CTW management avoids restrictive policies or conditions which would inhibit the full exercise of expertise.

8. Staff members work together toward mutually understood ends.

9. Staff members understand the need for and actively seek data as a basis for their activities; such data being derived from research, development, diffusion, and evaluation activities.

Based upon the data obtained and the personal observations and experiences of the visiting team, therefore, CTW seemed goal oriented and had accomplished a careful analysis of that goal in terms of what was needed and what had to be done to achieve it.

Chapter VI: Implications for Training

There is a tendency among interviewees, when asked about the requirements of their jobs, to supply a list of their own qualifications and aptitudes. This tendency was perhaps no more marked among the CTW interviewees than others; but, since their positions were in many cases specialized ones, the recommendations for training persons to assume such positions were naturally along lines paralleling their own experiences and competencies. There was enough commonality among the responses of the interviewees to make some generalizations however.

For those who were concerned with this preparation of people for the curricular aspects of "Sesame Street" and the reading program, courses in psychology, child development, learning, research methodology, and curriculum design were thought to be very useful. For those who were engaged in administration, personnel management skills were thought necessary. Expertise in budgeting was also mentioned. On-the-job training was considered absolutely essential for the television production jobs. Here is what the Studio Producer recommended:

.Three or four years production experience.

.Course work in responsibility to audiences and the communications profession.

.Training in how public broadcasting can help meet the needs of the public.

.Put person on a task he can handle in a real job, supervise him closely until he understands it, then let him grow out of the job. Move the man to another job that he can just handle, supervise him closely again, then let him grow until he has experienced all the production areas.

.Ongoing classwork concurrent with experience.

.Time to discuss the aesthetic and moral values in television work.

Other staff members emphasized the creative nature of their work. One felt strongly that "a person should be trained to gain an understanding of the creative nature of the film-making process."

Since CTW has a formal training program--its Writers' Workshop--it evidently feels a definite need to train people in the context in which they will work. The Writers' Workshop is managed by the Head Writer. It "hires young people who want to write for television, and they work two or three weeks in each department of CTW as well as two or three weeks in Canada with an animator." Writing skills, in fact, were emphasized by nearly all of the interviewees when they were asked about requirements for jobs at CTW.

In attempting to utilize these data, the trainer must keep in mind the context in which they were gathered. It may well be that this context will provide the critical distinction of this site from any other. In short, the context was one of goal-directed behavior. This goal was not related to the staff's daily technique-related activities but instead was a focused upon the children toward which the television program and related materials were directed. The staff's daily activities were not viewed as ends in and of themselves, but instead as means to an end. No time was spent describing the "balanced budget" but instead the interviewee directed himself to why the budget was critical to the store front viewing centers. This type of response was not elicited but volunteered by virtually every member of the CTW staff interviewed. Each individual's activities were viewed in the light of a corporate instead of a technique goal. Each individual staff member understood, as witnessed by their comments, his unique contribution to the overall end of the Corporation. It is worth mentioning that while many agencies and projects claimed to have similar circumstances, this was the first where the staff tempered their comments and activities in light of a set of understood corporate goals.

It seems to be the case, then, that while the staff members are highly competent in their respective areas, (as assured by hiring policies) this represents only a necessary and not a sufficient condition. Possibly one other critical ingredient is the orientation of the staff members of the corporation away from their own particular technique and toward its application to a real and identifiable problem. The trainer attempting to interpret these data should take this into serious consideration in attempting to reproduce that fervor and commitment of activity which seems to permeate the CTW organization. Competency within a technique area is not in and of itself going to produce an atmosphere such as that represented at CTW.

Appendices

Appendix A: Index of Tangible Products Including Product Focus

(asterisks indicate those interviewed and analyzed)

		Focus
P-001	Television Reading Program	Dev.
P-002	Animated Films for Reading Program	Dev.
P-003	Live Action Films for Reading Program	Dev.
P-004	Video Tape--Studio Bits for Sesame Street Program	Dev.
P-005	*Assembled Scripts for Reading Program	Dev.
P-006	Serialized Adventure Scripts for Reading Program	Dev.
P-007	Serialized Stories Manuscripts	Dev.
P-008	Reading Program Magazine	Dif.
P-009	Reading Program Teacher Guide	Dev.
P-010	Reading Program Parent Guide	Dev.
P-011	*Curriculum for Reading Program	Dev.
P-012	Reference Manual: Survey of Classroom Instruction System for Reading	Evl.
P-013	Story Boards for Animated Films for Reading Programs	Dev.
P-014	Time-Life Paperback Reprints--Related to Sesame Street	Dif.
P-015	Time-Life Book (5 titles) Related to Sesame Street	Dif.
P-016	Case Record Album--Year #1	Dif.
P-017	45 R.P.M. Record and Song Folio	Dif.
P-018	Sesame Street Records--Songs (Not Officially Authorized by CTW)	Dif.
P-019	Subcontracted Film Strips Related to Sesame Street	Dif.
P-020	Sesame Street Magazine	Dif.
P-030	Inserts for Sesame Street Shows	Dev.
P-031	*Live Action Films for Sesame Street Shows	Dev.

		Focus
P-032	Animated Films for Sesame Street Shows	Dev.
P-033	Film Book--Index of Film for Sesame Street	Dev.
P-034	Assembled Scripts for Sesame Street	Dev.
P-035	Curriculum for Sesame Street	Dev.
P-036	Video Tapes of Completed Sesame Street Programs	Dev.
P-037	Masters of Completed Sesame Street Programs	Dev.
P-048	*Sound Tracks for Films and Animated Segments	Dev.
P-050	ETS Evaluation Reports	Evl.
P-051	Internal Newsletter: "Scope"	Dif.
P-052	Video Tapes for Training Films--Concepts for Teachers and Principals	Dev.
P-053	Training Program for Utilization Coordinators	Dev.
P-054	Demonstration Program for Follow-up Activities for Sesame Street	Dev.
P-055	Films on Sesame Street Objectives for Parents	Dif.
P-056	Films on Sesame Street Objectives for Paraprofessionals	Dif.
P-057	Films on Sesame Street Objectives for Teachers	Dif.
P-058	Operations Manual for Utilization Center Offices	Dev.
P-064	Community Resource Directory	Evl.
P-065	Sesame Street Magazine--Spanish Language Version	Dif.
P-066	Guidelines for Helping Communities Utilize Sesame Street	Dev.
P-067	Guidelines for Interacting with Community/Neighborhood	Dev.
P-069	Demographic Data on Communities/Neighborhood	Evl.
P-070	Broadcast Reception Data	Evl.
P-071	Community Resource Data	Evl.

		Focus
P-072	Utilization Program Impact Data	Evl.
P-073	Data on Kind and Type of Preschool Activities Being Conducted Currently	Evl.
P-074	Operational Support Systems (Linkage to Childhood Care Centers, N.Y.C., etc.)	Dev.
P-075	Community Workshops for Parents, Teachers, and Administrators for Utilizing Sesame Street	Dev.
P-076	Bilingual Program Project Proposal	Dev.
P-077	Spanish Language Materials for Preschool Teachers	Dif.
P-078	Spanish Language Materials for Parents	Dif.
P-079	Spanish Language Activities for Preschool Teachers	Dif.
P-080	Spanish Language Activities for Parents	Dif.
P-081	Teacher-conducted Workshops for Spanish Paraprofessionals	Dev.
P-082	Special Project: Training Program for N.Y.C. Enrollees	Dev.
P-083	Audio Tapes for Reading Program for Viewing Center Use	Dif.
P-084	Allied Printed Materials for Reading Program	Dif.
P-087	Pilot Films of Reading Program for University Media Center	Dev.
P-088	Survey and Order Form: ETV Stations (for Magazine Distribution)	Dev.
P-089	Confirmed List of Distributing Agencies for Sesame Street Magazines	Dev.
P-090	List of Vista Volunteers	Evl.
P-091	Magazine Mailing List	Dev.
P-092	Socilicted Letters From Boards of Education on Needs for CTW Products	Evl.
P-095	Battery of Language and Reading Level Tests	Dev.
P-096	Normative Data on Inner-city Four-year Olds	Res.
P-097	Data on Program Appeal	Res.

		Focus
P-101	Memos On Instrumentation	Dev.
P-102	Final Reports to Funding Agencies	Dif.
P-103	Professional Publication Articles	Dif.
P-106	ETS Achievement Data	Evl
P-107	Teaching Research Data on Social Interaction	Res.
P-109	Description of Target Audience	Evl.
P-113	Format for Reading Program Research	Dev
P-114	List of Stimulus Variables to Be Studied	Dev.
P-115	Child Observation System	Dev.
P-116	Sight Vocabulary List	Evl.
P-117	Tests for Comprehended Language Level	Dev.
P-118	Test Item Analysis Data	Evl.
P-119	*Formative Goal Area Tests	Dev.
P-120	Statement of Problem/Goal Areas	Dev.
P-122	Data on Prereading Skills	Evl.
P-124	*Promotional Film for Reading Program	Dif.
P-125	*Progress Reports to USOE	Evl.
P-127	Final Report (Research)	Res.
P-128	Research Publication (ETS)-Commercial Version	Dif.
P-129	Catalog of Available Program Material	Dif.
P-130	Activity Books (Punch-out, Stick-on, Simple Puzzle Books)	Dif.
P-132	Sesame Street Pop-up Books (4)	Dif.
P-133	Sesame Street Story Book (1)	Dif.
P-134	Sesame Street Puppets	Dif.

		Focus
P-135	Beginning Readers: Bright and Early Series	Dif.
P-136	Sesame Street Song Book	Dif.
P-137	Books (2) by Famous Illustrator-Author	Dif.
P-138	Sesame Street--Inspired Toys	Dif.
P-139	Sesame Street--Inspired Games	Dif.
P-140	Cast Record Album--Year #2	Dif.
P-141	Recorded Songs from Sesame Street	Dif.
P-142	Educational Greeting Cards Inspired by Sesame Street	Dif.
P-143	Comic Strip Inspired by Sesame Street	Dif.
P-144	Guidelines for Helping Communities Utilize Reading Program	Dev.
P-177	*Magazine Articles	Dif.
P-178	*Newspaper Articles	Dif.
P-179	*News Releases	Dif.
P-183	*Field Research Data (Collected)	Res.
P-190	Sesame Street Calendar	Dif.
P-191	Television Viewing Center for Children	Dif.
P-192	Inner-city Utilization Offices	Dev.
P-193	*Sesame Street Television Programs	Dev.
P-194	Filmed Segments for Reading Program	Dev.
P-196	Writers' Notebook for Reading Program	Dev.
P-197	Film Book for Reading Program	Dev.
P-198	Time-Life Learning Kit (Related to Sesame Street)	Dif.
P-199	Sesame Street Magazine--Year #2	Dif.
P-200	Sesame Street Magazine--Spanish Version--Year #2	Dif.

		Focus
P-203	Tape File of All Bits, Segments, Inserts for Sesame Street	Dev.
P-204	Final Scripts for Sesame Street	Dev.

Appendix B: Index of Management Outputs Including Output Focus

(asterisks indicate those interviewed and analyzed)

		Focus
M-021	Adequate Operational Supplies for Filming Television Shows	Dev.
M-022	Provision of TV Studio Equipment	Dif.
M-023	Informal Financial Reports	Evl.
M-024	Formal Financial Reports	Evl.
M-025	Production Commitment Forms (Internal Request Forms)	Dev.
M-026	Purchase Orders for TV Production Equipment and Supplies	Dev.
M-027	Daily Log of Encumbrances	Dev.
M-028	Personal Contracts for Subcontracted Work	Dev.
M-029	Space/Facilities Contracts for TV Production	Dev.
M-038	*Budget for CTW Operations	Dif.
M-039	Number omitted	
M-040	Schedule of Delivery Services for Distribution of Tapes	Dev.
M-041	Specification for Production Facilities	Dev.
M-042	Specifications for Production--Broadcasting Crew	Dev.
M-043	Weekly Schedule of Television Production	Dev.
M-044	Monthly Schedule of Television Production	Dev.
M-045	*Writers' Notebook for Sesame Street	Dev.
M-046	Distribution Schedule for Sesame Street Shows	Dev.
M-047	*Screening Critique of Sesame Street	Evl.
M-049	*Writers' Assignment Sheets for Sesame Street	Dev.
M-059	Acquisition of Facilities for Utilization Offices	Dev.

		Focus
M-060	*Distribution System for Sesame Street Magazine	Dev.
M-061	Facilitation of Broadcast Reception	Dif.
M-062	Acquisition of Equipment and Facilities for Viewing Centers	Dif.
M-063	Staffing for Viewing Centers	Dif.
M-068	Cautions Regarding CTW's Relationships to Early Childhood Education Field	Dev.
M-085	Acquisition of Television Sets for Viewing Centers	Dif.
M-086	Consulting Services for School-generated Projects	Dev.
M-093	Description of Distribution Depots	Dev.
M-094	*Dissemination of Research Information	Dif.
M-098	Review of Sesame Street Program Scripts	Evl.
M-099	Researcher Training (OJT)	Dev.
M-100	Tracking of Testing Relative to Sesame Street	Evl.
M-104	Intraagency Coordination	Dev.
M-105	Interagency Coordination	Dev.
M-108	*Utilization Staff Welfare	Dif.
M-110	Adequate Inhouse Communications System	Dev.
M-111	Staffing Policy for Research Department	Dev.
M-112	Coordinated Field Research	Dev.
M-121	Seminars on Problem/Goal Areas	Dev.
M-123	*Speeches to Outside Groups on CTW's Operations	Dif.
M-126	Contract with Commercial Television Stations	Dev.
M-131	*Management of Production Personnel	Dev.
M-145	Speeches to Outside Groups about Reading Program	Dif.
M-146	*Relationships with Public Television Network	Dif.
M-147	*Relationships with Commercial Television Network	Dif.
M-148	*Formulation of Policy for CTW	Dev.

		Focus
M-149	*Solicitation of Funds for CTW	Dif.
M-150	*Implementation of Flexible Budgeting	Dev.
M-151	*Monitoring of Operations for Consistency of Philosophy	Dev.
M-152	*Overseeing of Production Activities for CTW	Dev.
M-153	*Adequate Staffing for Studio Production	Dev.
M-154	*Procurement of Funds for Cable Television Operation	Dif.
M-155	*Determination of Feasibility of Cable Television Operation	Evl.
M-156	*Procurement of Staff for Cable Television Operation	Dev.
M-157	Procurement of Funds for International Television Operation	Dif.
M-158	*Determination of Feasibility of International Operations	Evl.
M-159	Procurement of Staff for International Television Operations	Dev.
M-160	*Maintained Atmosphere in Which People Feel Effective	Dev.
M-161	*Expansion of Distribution of CTW Products	Dif.
M-162	*Expansion of Availability of CTW Products	Dif.
M-163	*Procurement of Funds for Film-cassette Capability	Dif.
M-164	*Determination of Feasibility of Film-cassette Capability	Evl.
M-165	*Procurement of Staff for Film-cassette Capability	Dev.
M-166	*Procurement of Funds for Foreign Film Distribution	Dif.
M-167	*Determination of Feasibility of Foreign Film Distribution	Evl.
M-168	*Procurement of Staff for Foreign Film Distribution	Dev.
M-169	*Procurement of Funds for New Studio in Mexico City	Dif.
M-170	*Determination of Feasibility of New Studio in Mexico City	Evl.

		Focus
M-171	*Procurement of Staff for New Studio in Mexico City	Dev.
M-172	*Organizational Management Structure	Dev.
M-173	*Planning for Future CTW Development	Dev.
M-174	*Information Dissemination	Dif.
M-175	*Text for Congressional Testimony	Dif.
M-180	*Intra- Interagency Relationships	Dif.
M-181	*Provided and Maintained Adequate Research Staff	Dev.
M-182	*Relationships with Cities and Communities	Dif.
M-184	*Training of Production Staff	Dev.
M-185	*Storage and Handling System for Films and Video Tapes	Dev.
M-186	*Procurement of Technical Equipment and Facilities	Dev.
M-187	*Staffing of Production Development Department	Dev.
M-188	*Staffing of Production Department	Dev.
M-189	*Plan for Non-Broadcast Program	Dev.
M-195	Writers' Assignment Sheets for Reading Program	Dev.
M-201	Writers' Workshop	Dev.
M-202	Selected and Trained Writers	Dev.
M-205	Annual Production Schedule for Sesame Street	Dev.
M-206	Number Omitted	
M-207	Number Omitted	
M-208	Goals from Proposal	Dev.

Appendix C: Listing of Products, Standards, Tasks, and Enablers

The following is a list of standards, tasks, and enablers for outputs around which interviews were conducted. These statements were extracted from discussion by the interviewee and were coded into their respective category sets. The selected code precedes the statement and indicates the following for:

Standards

J 1	Standards against which outputs are judged. (production oriented)
2	Standards against which processes and/or operations are judged. (management oriented)
LM	Major category label for standards.

Tasks

NO	Major category label for tasks.

Enablers

S 1	Knowledge.
2	Skill or ability to perform.
3	Sensitivity or awareness.
UV	Major category label for enablers--knowledges, skills, sensitivities.

The codes fround with these category labels are the same within each of the three categories (standards, tasks, enablers) found both here in the listing and previously in Chapter III tables.

P-005: Assembled Scripts

STANDARDS: No information collected under this heading.

TASKS:

NO	
05	Write film scripts for "Sesame Street" and reading show tying together various bits and pieces.

ENABLERS: No information collected under this heading.

P-011: Curriculum for Reading Program

STANDARDS:

J	LM	
1	19	The item (reading objective) can be visually produced.
1	11	The item does not involve putting too much print on the screen.
1	11	The item is not redundant (not one more item too many) in the curriculum.
1	11	The item is frequent enough in the language to consider.
1	11	Curriculum is manageable by the production department.
2	03	Feedback to revise or modify curriculum became minimal.

TASKS:

NO	
04	Determine target population for which the curriculum is developed.

13	Write to publishers for copies of reading programs.
12	Review reading program's common/general inclusion of curriculum items and/or procedures.
01	Review literature relevant to all aspects of reading.
07	Invite suggestions as to curriculum for the reading program from a wide variety of people.
06	Develop a rather exhaustive list of curriculum objectives.
14	Review and eliminate objectives based on considerations of production and problems unique to the target group.
03	Consider the age of the target population, the problem (remedial reading), and manageability of the curriculum by the production department in organizing the curriculum.
06	Organize the curriculum around reading processes or strategies, i.e., processing linear combinations, and then list an objective or objectives for each process or strategy.
09	Determine some of the unique problems for Black and Spanish children (in the target population) relative to reading.
12	Direct much of the curriculum toward Black and Spanish children in the targeted age group.
20	Decide upon a curriculum to use for the show.

ENABLERS:

S	UV	
1	01	Know which reading skills are basic and which skills are built on the basic skills.
1	02	Know the characteristic problems of poor readers.
1	06	Know the characteristic dialect confusions.
1	01	Know what types of skills are usually taught in beginning reading programs.
1	05	Know the characteristics of the target audience--(a) 7-10 year olds; (b) poor readers; (c) socio-economic poor children; (d) a large number would be Black or Spanish speaking.

P-031 Live Action Film for Sesame Street Shows

STANDARDS:

J	LM	
1	07	When the film seems "right" for "Sesame Street."
1	13	When executive producer and/or producer agree the film is right.

TASKS :

NO	
04	Put together notebook.
04	List goals from proposal in terms noneducators can understand.
03	Expand each goal to give understanding of scope and content to writers.
04	List strategies for presentation from former shows, own ideas, other ideas.
04	List examples of actual usage of various strategies.
04	Include research findings about skills and needs of three and four year olds.
03	Decide who should get notebook: writers, producers, cast members, animators, publishing department.
07	Keep list of who has notebook, to use as checklist for additions.
30	Walk each addition (memo) around to everyone who has notebooks to explain what it means and to be sure it was received.
04	Sensitivity to new problems of writers, producers, animators, which show need for new material in notebook.

P-048: Sound Tracks for Films--Animated Segments

STANDARDS:

J	LM	
1	13	Acceptance by Vice President of Program Production.
1	07	Own judgment says it is all right.
1	01	Covers all the items that were decided upon for content.
1	07	Meets own artistic or aesthetic standard.
1	07	Meets own perception of what children like to hear.
1	12	Research testing shows children learned what was intended.

TASKS:

NO	
01	View/screen film (if one) for understanding of content for which sound track is needed.
03	Make decision about type of sound needed for artistic or logical matching to material.
31	Let music writer know what content of style is needed if it's music.
03	If children used, decide age, kind of children, who can provide type of voices or reactions wanted.

TASKS:

NO	
02	Interview film makers about ideas for film projects to be used on "Sesame Street."
06	View pieces of films submitted by film makers.
21	Interview film makers about technical competence.
02	Go over scripts with film maker about live-action film to be used for "Sesame Street" with regard to subject matter and approach.
22	Consult with research department about any questions raised by film submitted with regard to subject matter and approach.
31	Go over budget for film with film makers.
23	Submit contract for film in consultation with Director of Operations.
06	Review film at rough-cut stage.
06	Review film at answer-print stage.
06	Review film at fine-cut stage.
06	Give suggestions for changes in production of live-action film.

ENABLERS:

S	UV	
3	27	Esthetics--"A sense of composition."
2	02	Ability to get along with people.
3	16	Aware of creative character of film-making process.
1	04	Knowledge of film and film making.
2	18	Judging (evaluation) the appropriateness of live-action film idea for "Sesame Street."

P-045: Writers' Notebook

STANDARDS:

J	LM	
1	01	Note book includes all memos, suggestions, samples, and research data.
1	05	Notebook is useful to writers as shown by their use of examples, and their success in writing scripts without educational errors.

03	Decide what sorts of things children are to say.
21	Arrange to hire children with children's parents or agency.
23	Make appointment with sound studio for appointment for taping.
23	Bring film to studio and arrange proper circumstances for taping.
03	Tell sound man specifications for recording--7 1/2, 16 mag. etc.
04	Make five or six takes, to make sure there is a usable product, within time allowed.
06	Listen to all takes and make notes about editing, (decide).
06	Sometimes, edit sound tape to proper length, quality.
06	Sometimes, work with tape editors to get complete tape as desired.
30	If sound track is for animation, send animation people all tapes for their own selection.
04	Work with children to get them to do what is wanted.
04	Invent ways of presenting the task that they will like.
04	Try to get kids to spontaneously talk, guide only when necessary.

ENABLERS:

S	UV	
3	01	Have to like children and understand, enjoy them to get responses you want.
3	17	Be able to predict how different types of children will act, in order to select proper children.
1	08	Must know what you want child at home to attend to.
1	19	Knowledge of the language of production to talk with technicians in order to tell them what is wanted.
1	04	Knowledge of production techniques in order to edit tapes.
1	08	Must know cognitive goals segment is intended to cover.
1	07	Must know research findings about what children respond to.
3	02	Sense when children are tired, more taping would waste resources.
1	04	Know what is possible in animation, in order to make tape that is usable.

P-119: Formative Goal Area Tests

STANDARDS:

J	LM	
1	04	Items are generally understood by target population.

S	UV	
1	11	Items are generally not too difficult or discouraging for the target population.
1	17	Internal consistency--item will differentiate between a good reader and a poor reader.

TASKS:

NO	
01	Review reading tests--looking for applicable test items.
04	Determine what test items, if any, would be useful in terms of the target population.
04	Design/develop test items that corresponded to the reading show curriculum.
03	Consider dialectic differences and confusions in developing test items and scoring test items.
03	Design test so that every error is recorded and distinguishable from other errors--much is learned from the errors made by those tested.
05	Field test the test items.
06	Eliminate test items that are not generally understood by field test population.
06	Eliminate test items that are generally too hard or discouraging to the field test population.
03	Design format for the test items.

ENABLERS:

S	UV	
1	05	Knowledge of linguistics--in terms of the kind of errors to expect.
1	08	Know what the errors would mean in terms of processing the written symbols.
1	06	Know how the errors could be influenced by dialect.
1	01	Know the common letter combinations which might be confused by poor readers.

P-124: Promotional Film for Reading Program

STANDARDS No information collected under this heading.

TASKS:

NO	
04	Produce short promotional film dealing with reading program.

01	Review all material available about reading program.
03	Select appropriate items regarding reading program for promotional film.
07	Distribute film through agency of CTW's Operations Dept.
02	Consult with Production Dept. about content of promotional film.

ENABLERS: No information collected under this heading.

P-125: Progress Reports to USOE

STANDARDS: No information collected under this heading.

TASKS:

NO	
05	Gather information to be able to put together reports to USOE and Carnegie Foundation every three months.
04	Write quarterly reports to USOE about all activities of CTW.

ENABLERS: No information collected under this heading.

P-177: Magazine Articles

STANDARDS:

J	LM	
1	25	People have heard about "Sesame Street."
2	17	Request for speaking engagements.
2	17	Continuing requests for news items are received.

TASKS:

NO	
01	Research topic problem addressed by dissemination task.
24	Present ideas or copy to be disseminated for review to project staff.

06	Implement or modify idea or copy for dissemination.
01	Assess other properties for their relative merit.
04	Write draft of information to be disseminated.
24	Observe to maintain an awareness of project activities and related activities elsewhere.
31	React to the various concerns of the project in relation to public image and publications pertaining to it.
01	Identify goals to be achieved.
03	Identify audiences.
31	Field unscheduled events as they come along.
25	Interpret CTW policy.

ENABLERS :

S	UV	
1	04	Training along lines of political science and journalism.
1	06	Knowing what the needs of the media are.
2	14	An ability to write clearly and concisely.
3	02	A feel for what a particular audience can understand.
1	06	OJT as an editor of a newspaper column.
2	18	Identifying which information others provide that is usable.
1	18	Knowing what staff is capable of.

P-178: Newspaper Articles

STANDARDS :

J	LM	
1	25	People have heard about "Sesame Street."
2	17	Request for speaking engagements.
2	17	Continuing requests for news items are received.

TASKS :

NO	
01	Research topic problem addressed by dissemination task.
24	Present ideas or copy to be disseminated for review to project staff.
06	Implement or modify idea or copy for dissemination.
01	Assess other properties for their relative merit.
04	Write draft of information to be disseminated.
24	Observe to maintain an awareness of project activities and related activities elsewhere.

31	React to the various concerns of the project in relation to public image and publications pertaining to it.
01	Identify goals to be achieved.
03	Identify audiences.
31	Field unscheduled events as they come along.
25	Interpret CTW policy.

ENABLERS:

S	UV	
1	04	Training along lines of political science and journalism.
1	06	Knowing what the needs of the media are.
2	14	An ability to write clearly and concisely.
3	02	A feel for what a particular audience can understand.
1	06	OJT as an editor of a newspaper column.
2	18	Identifying which information others provide that is usable.
1	18	Knowing what staff is capable of.

P-179: News Releases

STANDARDS:

J	LM	
1	25	People have heard about "Sesame Street."
2	17	Request for speaking engagements.
2	17	Continuing requests for news items are received.

TASKS:

NO	
01	Research topic problem addressed by dissemination task.
24	Present ideas or copy to be disseminated for review to project staff.
06	Implement or modify idea or copy for dissemination.
01	Assess other properities for their relative merit.
04	Write draft of information to be disseminated.
24	Observe to maintain an awareness of project activities and related activities elsewhere.
31	React to the various concerns of the project in relation to public image and publications pertaining to it.
01	Identify goals to be achieved.
03	Identify audiences.
31	Field unscheduled events as they come along.
25	Interpret CTW policy.

ENABLERS:

S	UV	
1	04	Training along lines of political science and journalism.
1	06	Knowing what the needs of the media are.
2	14	An ability to write clearly and concisely.
3	02	A feel for what a particular audience can understand.
1	06	OJT as an editor of a newspaper column.
2	18	Identifying which information others provide that is usable.
1	18	Knowing what staff is capable of.

P-183: Field Research Data

STANDARDS:

J	LM	
1	05	Field research data has provided producers with information which permitted them to move ahead with production.
1	06	Producers have begun to demand more in the way of field research data.
1	12	Evaluation of the impact of programming has shown that desired objectives are being reached.

TASKS :

NO	
31	Set up seminars to talk through specific goal areas to be addressed by television program.
31	Participate in seminars to determine variables to be studied in pursuit of a goal area, their measures, and the research design.
29	Recommend a continuous measure for observation of children to obtain data.
05	Observe level of children's understanding of the content of various existing television programs through talking with them about what they saw.
05	Determine that a group of 3-5 children being observed watching a program provides maximum information-giving interaction.
02	Explore ideas for research questions with related others, e.g., music director or regarding whether educational message should be on or off beat.
03	Design various presentation formats which represent the act of thinking (assist producers in this).
05	Test effectiveness of various formats representing thinking by having children select (in order of preference) those that most mean thinking to them.

05	Determine which stimulus attributes stand out most for children (have the greatest salience), form, size, class, etc.
05	Determine by talking with children, what the easiest multiple classification problem would be that you could give them.
03	Estimate an appropriate wording level for giving instructions to preschool children (in inner-city areas).
05	Test the effectiveness of the wording of instructions to preschool children by observing them responding to instructions.
04	Create lyrics for presenting instructions to preschool children (working with producer).
05	Test effectiveness of lyric form of presenting instructions to preschool children by observing them responding to instructions.
06	Determine modifications to instructions given preschool children that would permit them to be responsive on a second presentation.
04	Talk with cast members (presenting instructions) to suggest strategies, movements that might convey further meaning to the instructions being given.
04	Create test items to determine whether preschool children know anything about "work families" (reading).
05	Observe children responding to tests, programs, or materials to get a feeling about what is turning them on or off.
05	Analyze the results of tests to the extent necessary to determine why a piece of material is not working.
01	Select from the reading field the very beginning content material involved with various reading instruction methods, e.g., sight words, phonics.
03	Select (deductively) a list of words which are functional in a child's life, e.g., stop, go, telephone, etc.
01	Determine priorities for field research work to be done.
01	Review related films and materials to be used in gathering response data (from preschool children).
02	Conceptualize the testing of films and materials in terms of (classes of data to be gathered) information impact, appeal, etc.
23	Organize (arrange for) a field setting in which the testing of films and materials can be accomplished.
05	Present films and materials to be tested.
05	Make observations of children using materials being tested.
04	Create direct and indirect testing situations to assess effects of produced social interaction programming.
24	Supervise the analysis of data from field test of the prototype test items.
24	Insure data is analyzed so that it yields information that is appropriate/useful to the producers.
24	Insure data is reported in a form that the producers can understand.
05	Draw conclusions or recommendations from the analyzed data for the producers.

P-193: Sesame Street Television Program

STANDARDS:

J	LM	
2	04	All studio work completed according to schedule and script.
1	13	All studio work meets approval of the Executive Producer.
1	13	All studio work phases review of educational curriculum specialist from research unit as to presentation of educational goals.

TASKS:

NO	
21	Review scripts, to assess needs for talent, illustration, etc.
22	Write assessment of who is needed into weekly production schedule so they will know they are required on a given date.
22	At script meetings, interpret content of script for each (once a week) person involved, so he understands his responsibility (8 scripts at a time).
03	Assess need for and order special effects, graphics, sets, etc.
22	Set up full year production schedule, to cover all known needs for studio production facilities.
22	Make monthly production schedules, including number of show, so other people can plan their work to be on time.
22	Set up weekly production schedule, which includes specific responsibilities for each production person.
22	Interact with research people on best (most educationally effective) way to do a particular segment, according to their findings.
24	Check with all other project people frequently to make sure production ideas match general attitudes about the product.
24	Oversee work of each production person, to insure understanding of task and on time, quality performance of tasks.
26	Supervise actual filming of studio bits, to insure coordination of all efforts.
24	Supervise the exchange of information about way to do production tasks, by seeing that each person trains others to do his job.
22	Balance use of expensive elements across several shows, in order to stretch money without sacrificing quality of show.
26	Constantly talk both education and quality, so each staff member understands educational implications of his work, and strives for quality.
25	Encourage creation of and make use of innovations or additions to manner of doing task by any staff member which increases quality or educational utility of show.

ENABLERS:

S	UV	
1	24	Knowledge of all production tasks, resources, to assign responsibility to proper persons for each portion of each show.

1 24	Knowledge of time required to perform each task, to schedule proper amount of time for staff, facilities.
1 24	Knowledge of total time necessary for each show, in order to construct weekly, monthly and yearly production schedules.
1 07	Knowledge of research findings, in order to do each part in a manner which has most educational impact.
2 29	Skill in supervising work of others in a manner which doesn't interfere.
2 30	Skills in juggling resources available in order to get best possible product within the production budget.
2 19	Skill in inventing ways to present concepts which are sound in creation of educational impact.
1 08	Knowledge of educational goals of total project.
2 38	Skill in juggling resources available in order to get best possible product within the production budget.
3 27	Sensitivity to aesthetic impact of each segment, in order to control effect toward show.
1 05	Knowledge of likes and dislikes, attitudes and capabilities of four-year olds, in order to keep presentations within their liking and grasp.
3 02	Sensitivity to special skills or talents of staff, in order to encourage their efforts in directions which supply new material or additional quality to show.

Appendix D: Listings of Management Outcomes, Standards, Tasks, and Enablers

The following list presents the data gathered in relation to each of the management outcomes selected for analysis. The coding and identification numbers for the products, standards, tasks, and enablers follows the form described in Appendix C.

M-038: Budget for CTW Operations

STANDARDS:

J	LM	
1	13	Agreement with other CTW administrators that overall production budget (projected) is reasonable.
1	13	Agreement with production personnel that all needs are covered and product can be produced for budgeted amounts.
1	23	Comparison of actual running costs with 1st and 2nd projections shows only minor adjustments are necessary, unless there has been a drastic change in production needs.
1	12	Weekly data revealed by comparison of projected and actual budgets is shown on forms in such a way as to aid decision making.

TASKS:

NO	
22	Do annual projected budget, based on previous year's expenses.
22	Break annual budget into weekly segments for estimated budget.
22	Consult with production people on probable needs.
22	Guess on price increases on staff, materials.
22	Divide all items into logical categories.
22	Assign dollar amount to each category.
22	Devise form to relate actual weekly expenditure with projected expenditure in order to show over and under figures.
22	Devise cumulative form to fill in as you go along to show if you are over or under on weekly basis.
22	Design daily log to be used at studio to keep track of what is actually committed.
22	Work out second projected annual budget just before production season with actual costs.
22	Divide "real" (2nd) budget into weekly parts, by category.
30	Supervise accumulation of actual data each week, and recording of it to show + or - compared to projection.

22 Let production or other management people know if there is a significant + or - for a weekly budget, or consistent + or - for a category of expenditure.

22 Work with production people to figure out ways to keep costs near to projections--how to get what they need.

22 Keep track of possible padding to be used if shortages occur.

22 Keep pressure (word, informal) on production people to keep within their weekly budgets.

22 Review budgets submitted by contracted producers to see if they are about right for service which is being purchased.

ENABLERS:

S UV

2 31 Be able to think like a producer, to predict needs.

1 11 Have broad background in production to guess costs, knowledge of what it costs to get things done.

2 22 Be able to make wild guesses based on whatever information you have (skill in projecting costs).

1 06 Knowledge of what things cost in this city ($775 per hour for overtime use of studios, etc.)

3 23 Sensitivity to necessity of keeping track of money to keep CTW healthy.

2 20 Skill in estimating (sizing people up) what people really need to be paid for service.

1 04 Knowledge of bookkeeping practices, in order to be able to devise forms which keep track of what needs keeping track of.

1 24 Knowledge of production activities, in order to design daily log of financial commitments.

2 26 Skill in finding out lowest actual costs of materials and facilities, in order to do budget based on real costs just as production starts.

2 25 Skill in supervising, in order to monitor accumulation and recording of costs each week without interfering with subordinates.

2 30 Skill in presenting budgeting data to others in such a way as to keep them aware of the necessity for economy without irritating them or causing reduction in quality of the focal product.

3 32 Sensitivity to what production people really mean when they describe a need, in order to keep a mental concept of padding which might exist.

3 32 Sensitivity to production subcontractors real needs for contract monies, in order to negotiate lowest possible price for each subcontract.

M-047: Screening Critique of "Sesame Street"

STANDARDS :

J LM

2 27 Changes suggested are made: single time, or class of error.

1	01	Correspondence with script for goal areas covered, etc.
1	13	Agreement with other people on quality of show accepted.
1	07	Show looks and feels right.
1	12	Testing in research shows children learned what was intended they learn.

TASKS:

NO	
24	Watch show on screen in office building with colleague.
06	Check that writers followed script, using right segments.
06	Check that writers used right print of segment.
06	Check that writers used right version of segment.
06	Check for technical errors: sound too far up or down.
06	Check for inadvertent changes in script.
06	Check for educational errors--decide if covers intended goal areas adequately.
06	Check for sensible continuity, do segments that need lead-ins have them.
06	Check for Spanish usage--is it correct in grammar, content.
30	Inform production people of changes needed.
22	Evaluate cost of changes indicated.
31	Advise production department regarding mandatory changes.
24	Watch for trends in production errors.
30	Inform production people of trends of errors.
33	Obtain administrative support for production revision decisions.
04	Work with production people on inventing solution to presentation problems.

ENABLERS:

S	UV	
1	08	Know goals of show.
1	08	Know basic decisions on presentation: Example: no two confusing letters together.
1	09	Know working of studio: how things are done, how much time, in order to make decisions on what's practical and not, also to be aware of possibilities for creation of lists or correction of errors.
1	19	Know language of film.
1	19	Know language of video tape.
1	07	Knowledge of all that has been written for show.
1	07	Know recent research results.
2	02	Must be enormously diplomatic; researcher working with artistic temperament who feel they know what they are doing artistically must make suggestions from research point of view or if making artistic judgments, must discuss it until they think they did it themselves.
2	29	Skill in presenting errors to production people so they can accept them.
2	23	Ability to negotiate with production people on modifying material.

3	19	Skill in knowing when to call in superiors on changes.
3	04	Care in working with production people on production method changes so basic trust in working relationship is not broken by appearing to do their job.

M-049: Writers' Assignment Sheets

STANDARDS:

J	LM	
2	14	I feel it myself when the show really fits well and one thing relates to another.
1	26	Different pieces blend and overlap very well.
1	06	Feedback from research department lets us know the kids are interested.

TASKS

NO	
04	Compose writer's (curriculum) assignment sheets.
22	Consult with research department as to where certain pieces fit in best with educational goals.
24	Watch show, with writer's assignment sheet as a guide, to see how segments fit together.
25	Spell out educational goals to writers.
31	Insert references to appropriate live action film (individual film segments) of cast into appropriate areas of curriculum on assignment sheets.
06	Make sure that every piece that is supposed to be included in a show actually is.
31	Record number of times a piece is included on shows and the dates when it is included.
24	Read writers' scripts to make sure all goal areas are properly covered and show is structured properly.

ENABLERS:

S	UV	
1	08	Knowledge of book or listings of film and video tapes (requiring a "very good memory").
1	08	Knowledge of writers' notebook.
2	36	Ability to categorize or classify information.
2	27	Ability to search out information from files.
2	14	Ability to write creative material.
2	27	Ability to type.
3	04	Aware of what is happening in the projects--"how it affects your job and how your job affects everyone else."

M-060: Distribution System for Sesame Street Magazine

STANDARDS:

J	LM	
1	28	Magazine distribution system can be operated adequately by someone else filling in.
2	33	Mailing list grows and number of distribution depots increases.
1	09	Complaints traceable to faults in the distribution system under project control are minimal.

TASKS:

NO	
01	Determine purposes to be served by a depot for distributing free magazines to children in inner-city neighborhoods.
03	Specify criteria for identifying and selecting magazine distribution depots, e.g., in heavy traffic patterns, supervision available, etc.
23	Identify various agencies and institutions which could relate to magazine distribution efforts.
32	Communicate with agencies, institutions, and depots regarding any changes in magazine, size, bulk, etc.
23	Survey educational television stations to identify what programs exist in the areas and who is responsible for them.
23	Confirm legitimacy of potential distribution sites.
32	Communicate with VISTA personnel for assistance in identifying distribution sites, need for free magazines, etc.
04	Develop a mailing list for the magazine, including free shipments to distribution centers, appropriate waiting rooms, etc.
04	Develop an information handling system which ensures prompt responses to inquiries.
22	Follow up inquiries for free magazines by communicating directly with persons authorized to qualify recipients for free distribution.

ENABLERS:

S	UV	
2	11	Patience with people registering complaints about magazine distribution.
2	16	Must have some marketing skills relative to display of magazine in heavy traffic areas, etc.
1	25	Must have some knowledge of sources of information about the characteristics of a distribution area.
2	09	Must have a pronounced degree of logic in your behavior.
2	02	Must be extroverted enough to talk to others long enough to resolve a problem or achieve an element of cooperation.

2	30	Must have a high degree of flexibility in responding to others or in solving a distribution problem.
2	18	Identifying and minimizing operational duplication of effort.
2	02	Must have a skill in utilizing a "single concept" approach in communicating with others.
2	35	Must be able to use simplicity in language when communicating with others.
3	06	Must have some sense of appreciation for and enjoy working with statistics.
3	04	Must enjoy working with people.
2	02	Skill in making others feel as though they are serving an important purpose.

M-094: Dissemination of Research Information

STANDARDS:

J	LM	
1	05	Information has utility--it has served multiple purposes, i.e., situations for programming and required data base for child behavior.
2	15	Writers are responsive to the information generated and are able to produce on the basis of it.

TASKS:

NO	
32	Speak at television or educational seminars describing sponsors purposes, objectives, and operations.
24	Monitor the developmental efforts of subcontractors to be sure that progress is being made.
32	Provide sponsor feedback to subcontractor about the design of a situational testing proposal.
07	Represent sponsor in interagency meeting dealing with the possible publishing of tests developed by subcontractor.
06	Critique printed materials being developed in relation to the research experience with a televised program on which the materials are based.
02	Talk to staff and potential subcontractor exploring the possibilities of building and measuring programs around social interaction.
30	Keep subcontractor advised at all times as to what kinds of output would be maximally useful to sponsor and at what points in time.
29	Advise subcontractor that initial observational data submitted had direct relevance.

29 Determine (with subcontractor) various alternatives for the use of observational data by program writers.

23 Decide with subcontractor to have some social interaction testing situations directly related to program content, then move away from the direct relationship to various levels of generality.

24 Monitor progress of program production to keep abreast of what is happening.

29 Negotiate for program writers' time to participate in discussion of suggested program situations with producers and research personnel.

05 Review observational data (social interaction) with program writers.

01 Specify areas of social interaction around which initial program production is desired.

04 Write various script drafts (for social interaction program focus).

24 Review various script drafts (social interaction program focus) with writers.

31 Tell writers which parts of scripts I liked or didn't like, and why I thought it would work or wouldn't work with kids.

24 Reduce number of script drafts to 10 or 12 considered to be the best.

24 Submit screened script drafts to production personnel for final selection of three scripted situations to be produced.

31 Advise subcontractor of the situations developed from observational data that are going to be produced.

22 Put pressure on supervisor to work toward obtaining funds for an effort by subcontractor to evaluate experimental running of social interaction programming.

ENABLERS:

S UV

1 07 Must know the project (and agency) operation.

2 19 Must be able to see what the project needs are.

2 30 Must be flexible in listening to other people's ideas of what things they can do to meet project needs.

3 03 Must have a sensitivity to the needs of production personnel as to the kinds of information they can be responsive to.

M-108: Utilization Staff Welfare

STANDARDS:

J LM

2 15 Staff demonstrates initative.

2 26 Staff demonstrates loyalty or commitment to the department.

2 29 Feeling that staff is energetic, creative, and innovative.

2	15	It is not necessary to tell everything to the person, he goes ahead.
2	15	Staff grows out of a dependency state (the need to be told everything).
2	01	Staff demonstrates ability to understand and work toward goals set for them according to the function defined for them.
2	30	Attrition rate of staff very small.

TASKS:

NO	
25	Explain to staff causes of their frustrations as best as the causes are known.
25	Discuss with staff possible ways of handling frustrating situations.
25	Help staff understand the importance of the (emerging) utilization department. (We're where the action is!)
25	Emphasize to staff that the last assessment of the project may well depend upon what we (utilization department) do.
29	In dealing with minority group dynamics in any corporate structure deal with realities, interpreting position to minority and majority groups.
29	Work to create an awareness (across the project) of a problem, so that all forces will go to work to see if something can be done about it.
22	Assign three staff members to brainstorm redefinition of short term and long term goals for coordinators in the field.
24	Assess staff for fit in job, demonstrated competency, or talent.
24	Explore for other job fits with individuals as indicated.

ENABLERS:

S	UV	
3	36	Must have a feeling of personal security--no sense of threat.
3	20	Must have a commitment to the concept of developing talent (in others).
3	29	Must be challenged by doing something new where the emphasis is on experimentation.
3	01	Must be willing to leave people free to fail, and then to try another way.
1	09	Must have a knowledge of project priorities.
3	01	Must have a sense of what an assignment might do for a person.
3	03	Must have a sense of staff interests, including those of support staff.
3	18	Must have some sense as to at what point one breaks off an investment in someone.

M-123: Speeches to Outside Groups on CTW's Operations

STANDARDS: No information collected under this heading.

TASKS:

NO	
25	Make speeches to outside groups about "Sesame Street."

ENABLERS: No information collected under this heading.

M-131: Management of Production Personnel

STANDARDS:

J	LM	
2	02	Staff feel as if they have a clearly established function which they regard as satisfying and important.
2	02	Staff feel as if they aren't jailed in a particular function/category.
2	31	Staff willing to work late hours--indication of their commitment.
2	20	Staff have executed their jobs accurately.
2	26	Staff all feel responsible for every piece of material that is on the air.

TASKS:

NO	
21	Determine what are the discrete and assignable duties.
21	Determine how many staff are needed to perform work within each area of responsibility.
33	Determine what the relationship should be between the project director and staff in charge of these areas of responsibility.
33	Determine how freely or tightly reined these people (task leaders), in areas of responsibility, should operate.
21	Assign salaries on the basis of job capacity and title.
22	Assign staff tasks and responsibilities--try to give a staff member total responsibility in a small area.
24	Assess staff performance of an assignment on the basis of execution of that assignment and/or product produced.
24	Insure/maintain staff productivity by initiating corrective action as necessary--nag, question etc.
25	Insure/maintain staff satisfaction.
25	Talk to staff as much as possible and let them feel they can talk to me--door is open.
31	Hold regular staff meetings so everyone is kept apprised of what everyone else is doing--weekly meetings.
25	Provide condition for staff to stimulate and/or generate ideas--condition in a regular staff meeting.

29 Try to provide a very informal working atmosphere where there is no caste system and staff is accessible to one another.
25 Make clear to staff the organization of the project.
21 Insure that the organization of the project reflects a wise use of human resources but is kept flexible.
25 Arbitrate conflicts between and among staff members.
25 Listen to both sides on the conflict or argument.
25 If one party is wrong in the opinion of the Project Director, he (Project Director) will say so.
25 If there is right on both sides (of an argument), would attempt to have all parties settle the dispute together.
24 Keep close checks on the development of project materials.
24 Read all the material that is written.
24 Look at all the story boards that are submitted.
31 Talk to staff about their ideas before they present them to animators.
31 Sit in on discussions that people are having with subcontractor

ENABLERS:

S	UV	
1	10	Knowledge of how staff members work with/or for other people in their area--found out by noble and ignoble methods.

M-146: Relationships with Public Television Network

STANDARDS: No information collected under this heading.

TASKS;

NO	
32	Act as liaison with Public Television Network.
04	Conduct a series of meetings throughout the country about the

ENABLERS: No information collected under this heading.

Although very little information was collected regarding relationships with the Public Television Network, the person whose job it is to establish and maintain working relationships with the public and private television stations--the Director of Development--indicated that liaison with the stations is a very important matter to the Workshop. There are times when CTW must monitor private television stations carefully to see that there is no misuse of the program (i.e., "Sesame Street"). CTW tries to make sure that no commercial interest capitalizes upon the program, for example. The major problems have been in the area of reception; certain geographical regions have experienced difficulty in getting good reception, but these problems are being worked out satisfactorily.

M-147: Relationships with Commercial Television Networks

STANDARDS: No information collected under this heading.

TASKS:

NO	
32	Act as liaison with commercial television networks.
32	Conduct series of meetings throughout the country about the reading program.
31	Refer legal problems arising from contracts with commercial networks to staff legal counsel.
23	Negotiate terms of arrangement to telecast "Sesame Street" with commercial stations.

ENABLERS: No information collected under this heading.

M-148: Formulation of Policy for CTW

STANDARDS: No information collected under this heading.

TASKS:

NO	
29	Make sure that "all departments pull together at all times."
31	Offer opinions to department heads on important matters.
25	Make policy decisions when department heads ask for them.
33	Help make decisions about legal problems.
33	Help make decisions about fiscal problems.
33	Make decision of what the next project will be.
22	Announce what the next project will be.
33	Help make decisions about staffing.
21	Look into the personnel problems.
22	Meet with Chairman of Board of Trustees in dealing with policy questions (almost daily).
31	Meet three times a year with the Board of Trustees.

31	Meet with heads of departments and others weekly.
30	See to it that educational advisers and production people communicate with each other.
31	Meet with nonbroadcast staff weekly.
33	Help make decisions about promotions of staff members.
24	Review program's content with respect to taste, aesthetics, and policy.

ENABLERS : No information collected under this heading.

M-149: Solicitation of Funds for CTW

STANDARDS : No information collected under this heading.

TASKS :

NO	
22	Make contacts with funding agencies in order to receive financial support for CTW.

ENABLERS : No information collected under this heading.

M-150: Implementation of Flexible Budgeting

STANDARDS :

J	LM	
2	13	When budget is not exceeded by the department.
2	11	Variance between projected cost from January to June is small.

TASKS :

NO	
24	Find ways of controlling costs.
30	Get financial staff involved in the production of the product, participating in decision-making.
23	Engage legal firms to handle legal matters.
33	Help make decisions at top level for all departments about actions to be taken.

31 Conduct budgeting sessions with each department at the beginning of every year.

33 Help make decisions about major changes in the budgets of the departments.

22 Prepare report for every department concerning what has happened in the budget and projections to the end of the year.

31 Meet with department head, President, and others in weekly meeting.

24 Engage in discussions with publishers in working out details of proposed books.

23 Engage in discussion of royalties with record companies.

21 Hire competent persons to assist in carrying out functions of financial advising and accounting for CTW.

ENABLERS:

S	UV	
1	04	Knowledge of accounting.
3	03	Sensitive to the need people have for some flexibility in making plans.
1	04	Knowledge of business law.
3	32	Know when to "shorten the leash" when problems (money) are difficult.

M-151: Monitored Operations for Consistency of Philosophy

STANDARDS: No information collected under this heading.

TASKS:

NO	
24	Monitor operations of departments to insure consistent philosophy throughout CTW.
31	Conduct meetings bringing together people from various departments to clarify philosophy on operational level.

ENABLERS: No information collected under this heading.

M-152: Overseeing of Production Activities for CTW

STANDARDS:

J	LM	
2	15	There would be a steady stream of people through the office door if the job were not being done properly--the job of creating a healthy atmosphere.

TASKS

NO	
24	Monitor show as it is being taped in studio.
24	Monitor show as it is being broadcast to public.
24	Make judgments about acting.
24	Make judgments about film segments.
24	Make judgments about scripts.
22	Confer with head of research department about educational content of shows.
24	"Blend" people--putting people together who work well together.
31	Meet with president, department heads, and others in weekly meeting.
24	Keep an overall view of what has to get done, i.e., "who does what and who does it when."
25	Help make policy in budgetary matters with regard to production of shows.
25	Help make policy with regard to research.
33	Troubleshoot when occasion demands.
25	Counsel personnel when they need help.
31	Meet with members of advisory board about educational content of shows.
22	Help revise curriculum for "Sesame Street" program.
22	Keep in constant contact with producer of "Sesame Street" and reading program about time lines.
24	Make adjustments in assignments of producers and writers when necessary.

ENABLERS:

S	UV	
3	03	Indicating to people at the studio that "I care."
3	11	Be conscious--"a practical understanding"--that a manager has his own style.
3	02	Recognizing talents of people.
2	18	Assigning people to roles in which they can utilize their talents.
2	11	Permitting individual staff members to use their talents to the extent possible within the organization.

M-153: Adequate Staffing for Studio Production

STANDARDS:

J	LM	
2	13	Salary of total staff selected falls within budget restrictions.
2	12	Each task of production is covered by at least one person.
2	26	Persons display through work that assessment of dedication, intelligence, self-monitoring and potential for growth was correct.
2	30	Lack of necessity to fire persons for inadequate or untimely performance of tasks.
2	25	Lack of personal friction between staff members who work together.

TASKS:

NO	
21	Send out word to agencies, friends, business acquaintances that staff is to be hired.
21	Read resumes and vital for general background: lots of work experience but no TV.
22	Decide who to interview for possible selection to production staff.
21	Conduct interview with persons in private at studio, describing task the person is being interviewed for.
21	Assess person for commitment to educational television, interest in children, compatibility with present staff, dedication to quality work, interest in TV.
21	Decide whether or not to hire the person, and tell him.

ENABLERS:

S	UV	
1	12	Knowledge of sources of young, energetic, ambitious people.
1	24	Knowledge of all production tasks, in order to select the right staff and enough but not too much staff.
1	05	Knowledge of kinds of experience which are helpful to or hinder work in the TV production of children's shows.
2	24	Skill in describing job, so person can be sure he is interested in doing it.
2	18	Skill in judging match between person and task for which he may be hired.
3	16	Sensitivity to degree of match of person's philosophy about responsibility of TV to public with that of CTW staff.
3	17	Sensitivity to kind of personality person has, in order to judge whether he could get along with current staff.
2	37	Skill in assessing growth potential of person, so people selected can learn all the production tasks eventually.
2	18	Skill in assessing person's real motive for taking job in order to select those with commitment to quality children's TV.
3	03	Sensitivity to nuances of person's need in order to select people who can be self-monitoring and self-actualizing.
2	02	Skill in "drawing out" person in interview situation, so he says enough to be judged upon.

M-154: Procurement of Funds for Cable TV Operation

STANDARDS:

J	LM	
1	06	Acceptance of CTW products by users.
2	13	Cost of distribution in keeping with available money.
1	06	Happy kids.

TASKS:

NO	
23	Assess potential of other business groups.
25	Interpret CTW policy
03	Interpret CTW objectives
22	Direct operations in area of responsibility within CTW.
25	Establish new policy.
23	Establish contacts with other corporations.
23	Negotiate contracts for cable TV operation.
21	Staff cable TV operation.
23	Assess cable TV operation.
23	Establish relationship with other film producers.
01	Explore ideas of others for possible marketable ideas.
25	Determine policy of Workshop.

ENABLERS:

S	UV	
1	08	Know objectives of new product line.
1	06	Understand how other corporations function.
2	23	Negotiating contracts with other corporations.
3	30	Feel for other group with whom we are dealing.
1	06	Past experience as CBS executive.

M-155: Determination of Feasibility of Cable TV Operation

STANDARDS:

J	LM	
1	06	Acceptance of CTW products by users.
2	13	Cost of distribution in keeping with available money.
1	06	Happy kids.

TASKS:

NO	
23	Assess potential of other business groups.
25	Interpret CTW policy.
03	Interpret CTW objectives.
22	Direct operations in area of responsibility within CTW.
25	Establish new policy.
23	Establish contacts with other corporations.
23	Establish coventures with other corporations.
23	Negotiate contracts for cable TV operations.
21	Staff cable TV operation.
23	Assess cable TV operation.
23	Establish relationship with other film producers.
01	Explore ideas of others for possible marketable ideas.
25	Determine policy of Workshop.
25	Help make policy in matters dealing with cable TV.

ENABLERS:

S	UV	
1	08	Know objectives of new product line.
1	06	Understand how other corporations function.
2	23	Negotiating contracts with other corporations.
3	30	Feel for other group with whom we are dealing.
1	06	Past experience as CBS executive.

M-156: Procurement of Staff for Cable TV Operation

STANDARDS:

J	LM	
1	06	Acceptance of CTW products by users.
2	13	Cost of distribution in keeping with available money.
1	06	Happy kids.

TASKS:

NO	
23	Assess potential of other business groups.
25	Interpret CTW policy.

03	Interpret CTW objectives.
22	Direct operations in area of responsibility within CTW.
25	Establish new policy.
23	Establish contacts with other corporations.
23	Establish coventures with other corporations.
23	Negotiate contracts for cable TV operation.
21	Staff cable TV operations.
23	Assess cable TV operations.
23	Establish relationship with other film producers.
01	Explore ideas of others for possible marketable ideas.
25	Determine policy of workshop.

ENABLERS:

S	UV	
1	08	Know objectives of new product line.
1	06	Understand how other corporations function.
2	23	Negotiating contracts with other corporations.
3	30	Feel for other group with whom we are dealing.
1	06	Past experience as CBS executive.

M-158: Determination of Feasibility of International Television Operations

STANDARDS: No information collected under this heading.

TASKS:

NO	
25	Help make policy in matters dealing with international operations.

ENABLERS: No information collected under this heading.

M-160: Maintained Atmosphere in Which People Feel Effective

STANDARDS: No information collected under this heading.

TASKS :

NO	
25	Create atmosphere in which people feel they are worthwhile professionals.
25	Making sure people on staff are being paid what they think they are worth (within reason).
25	Reassure people ("patting them on the back") in production department.

ENABLERS: No information collected under this heading.

M-161: Expansion of Distribution of CTW Products

STANDARDS:

J	LM	
1	06	Acceptance of CTW products by users.
2	13	Cost of distribution in keeping with available money.
1	06	Happy kids.

TASKS:

NO	
23	Assess potential of other business groups.
25	Interpret CTW policy.
03	Interpret CTW objectives.
22	Direct operations in area of responsibility within CTW.
25	Establish new policy.
23	Establish contacts with other corporations.
23	Establish coventures with other corporations.
23	Negotiate contracts for cable TV operation.
21	Staff cable TV operations.
23	Assess cable TV operations.
23	Establish relationship with other film producers.
01	Explore ideas of others for possible marketable ideas.
25	Determine policy of Workshop.

ENABLERS:

S	UV	
1	08	Know objectives of new product line.
1	06	Understand how other corporations function.
2	23	Negotiating contracts with other corporations.
3	30	Feel for other group with whom we are dealing.
1	06	Past experience as CBS executive.

M-162: Expansion of Availability of CTW Products

STANDARDS:

J	LM	
1	06	Acceptance of CTW products by users.
1	13	Cost of distribution in keeping with available money.
1	06	Happy kids.

TASKS

NO	
23	Assess potential of other business groups.
03	Interpret CTW policy.
22	Interpret CTW objectives.
25	Direct operations in area of responsibility within CTW.
23	Establish new policy.
23	Establish coventures with other corporations.
23	Establish contacts with other corporations.
23	Negotiate contracts for cable TV operation.
21	Staff cable TV operations.
23	Assess cable TV operations.
23	Establish relationships with other film producers.
01	Explore ideas of others for possible marketable ideas.
25	Determine policy of Workshop.

ENABLERS

S	UV	
1	08	Know objectives of new product line.
2	13	Understand how other corporations function.
2	23	Negotiating contracts with other corporations.
3	30	Feel for other group with whom we are dealing.
1	06	Past experience as CBS executive.

M-163: Procurement of Funds for Film-cassette Capability

STANDARDS:

J	LM	
1	06	Acceptance of CTW products by users.

2	13	Cost of distribution in keeping with available money.
1	06	Happy kids.

TASKS:

NO	
23	Assess potential of other business groups.
25	Interpret CTW policy.
03	Interpret CTW objectives.
22	Direct operations in area of responsibility within CTW.
25	Establish new policy.
23	Establish contacts with other corporations.
23	Establish coventures with other corporations.
23	Establish relationship with other film producers.
01	Explore ideas of others for possible marketable ideas.
25	Determine policy of Workshop.

ENABLERS:

S	UV	
1	08	Know objectives of new product line.
1	06	Understand how other corporations function.
3	30	Feel for the group with whom we are dealing.
1	06	Past experience as CBS executive.
2	23	Negotiating contracts with other corporations

M-164: Determination of Feasibility of Film-cassette Capability

STANDARDS:

J	LM	
1	06	Acceptance of products by user.
2	13	Cost of distribution in keeping with available money.
1	06	Happy kids.

TASKS:

NO	
23	Assess potential of other business groups.
25	Interpret CTW policy.
03	Interpret CTW objectives.
22	Direct operations in area of responsibility within CTW.
25	Establish new policy.
23	Establish contact with other corporations.

23	05	Establish coventures with other corporations.
23	05	Establish relationship with other film producers.
01	11	Explore ideas of others for possible marketable ideas.
25	01	Determine policy of Workshop.

ENABLERS:

S	UV	
1	08	Know objectives of new product line.
1	06	Understand how other corporations function.
2	23	Negotiate contracts with other corporations.
3	30	Feel for the group with whom we are dealing.
1	06	Past experience as CBS executive.

M-165: Procurement of Staff for Film-cassette Capability

STANDARDS:

J	LM	
1	06	Acceptance of CTW products by user.
2	13	Cost of distribution in keeping with available money.
1	06	Happy kids.

TASKS:

NO	
23	Assess potential of other business groups.
25	Interpret CTW policy.
03	Interpret CTW objectives.
22	Direct operations in area of responsibility within CTW.
25	Establish new policy.
23	Establish contacts with other corporations.
23	Establish coventures with other corporations.
23	Establish relationship with other film producers
11	Explore ideas of others for possible marketable ideas.
25	Determine policy of Workshop.

ENABLERS:

S	UV	
1	08	Know objectives of new product line.
1	06	Understand how other corporations function.
3	30	Feel for the group with whom we are dealing.
1	06	Past experience as CBS executive.
2	23	Negotiate contracts with other corporations.

M-166: Procurement of Funds for Foreign Film Distribution

STANDARDS:

J	LM	
1	06	Acceptance of CTW products by user.
2	13	Cost of distribution in keeping with available money.
1	06	Happy kids.

TASKS:

NO	
23	Assess potential of other business groups.
25	Interpret CTW policy.
03	Interpret CTW objectives.
22	Direct operations in area of responsibility within CTW.
25	Establish new policy.
23	Establish contacts with other corporations.
23	Establish coventures with other corporations.
23	Establish relationship with other film producers.
01	Explore ideas of others for possible marketable ideas.
25	Determine policy of Workshop.

ENABLERS:

S	UV	
1	08	Know objectives of new product line.
1	06	Understand how other corporations function.
3	30	Feel for the group with whom we are dealing.
1	06	Past experience as CBS executive.
2	23	Negotiate contracts with other corporations.

M-167: Determination of Feasibility of Foreign Film Distribution

STANDARDS:

J	LM	
1	06	Acceptance of CTW products by user.
2	13	Cost of distribution in keeping with available money.
1	06	Happy kids.

TASKS :

NO	
23	Assess potential of other business groups.
25	Interpret CTW policy.
03	Interpret CTW objectives.
22	Direct operations in area of responsibility within CTW.
25	Establish new policy.
23	Establish contacts with other corporations.
23	Establish coventures with other corporations.
23	Establish relationship with other film producers.
01	Explore ideas of others for possible marketable ideas.
25	Determine policy of Workshop.

ENABLERS :

S	UV	
1	08	Know objectives of new product line.
1	06	Understand how other corporations function.
3	30	Feel for the group with whom we are dealing.
1	06	Past experience as CBS executive.
2	23	Negotiate contracts with other corporations.

M-168: Procurement of Staff for Foreign Film Distribution

STANDARDS:

J	LM	
1	06	Acceptance of CTW products by user.
2	13	Cost of distribution in keeping with available money.
1	06	Happy kids.

TASKS:

NO	
23	Assess potential of other business groups.
25	Interpret CTW policy.
03	Interpret CTW objectives.
22	Direct operations in area of responsibility within CTW.
25	Establish new policy.
23	Establish contacts with other corporations.
23	Establish coventures with other corporations.
23	Establish relationship with other film producers.
01	Explore ideas of others for possible marketable ideas.
25	Determine policy of Workshop.

ENABLERS:

S	UV	
1	08	Know objectives of new product line.
1	06	Understand how other corporations function.
3	30	Feel for the group with whom we are dealing.
1	06	Past experience as CBS executive.
2	23	Negotiate contracts with other corporations.

M-169: Procurement of Funds for New Studio in Mexico City

STANDARDS:

J	LM	
1	06	Acceptance of CTW products by user.
2	13	Cost of distribution in keeping with available money.
1	06	Happy kids.

TASKS:

NO	
23	Assess potential of other business groups.
25	Interpret CTW policy.
03	Interpret CTW objectives.
22	Direct operations in area of responsibility within CTW.
25	Establish new policy.
23	Establish contacts with other corporations.
23	Establish coventures with other corporations.
23	Establish relationship with other film producers.
01	Explore ideas of others for possible marketable ideas.
25	Determine policy of Workshop.

ENABLERS:

S	UV	
1	08	Know objectives of new product line.
1	06	Understand how other corporations function.
3	30	Feel for the group with whom we are dealing.
1	06	Past experience as CBS executive.
2	23	Negotiate contracts with other corporations.

M-170: Determination of Feasibility of New Studio in Mexico City

STANDARDS:

J	LM	
1	06	Acceptance of CTW products by user.
2	13	Cost of distribution in keeping with available money.
1	06	Happy kids.

TASKS:

NO	
23	Assess potential of other business groups.
25	**Interpret CTW policy.**
03	**Interpret CTW objectives.**
22	Direct operations in area of responsibility within CTW.
25	Establish new policy.
23	Establish contacts with other corporations.
23	Establish coventures with other corporations.
23	Establish relationship with other film producers.
01	Explore ideas of others for possible marketable ideas.
25	Determine policy of Workshop.

ENABLERS:

S	UV	
1	08	Know objectives of new product line.
1	06	Understand how other corporations function.
3	30	Feel for the group with whom we are dealing.
1	06	Past experience as CBS executive.
2	23	Negotiate contracts with other corporations.

M-171: Procurement of Staff for New Studio in Mexico City

STANDARDS:

J	LM	
1	06	Acceptance of CTW products by user.
2	13	Cost of distribution in keeping with available money.
1	06	Happy kids.

TASKS:

NO	
23	Assess potential of other business groups.
25	Interpret CTW policy.
03	Interpret CTW objectives.
22	Direct operations in area of responsibility within CTW.
25	Establish new policy.
23	Establish contacts with other corporations.
23	Establish relationship with other film producers.
23	Establish coventures with other corporations.
01	Explore ideas of others for possible marketable ideas.
25	Determine policy of Workshop.

ENABLERS:

S	UV	
1	08	Know objectives of new product line.
1	06	Understand how other corporations function.
3	30	Feel for the group with whom we are dealing.
1	06	Past experience as CBS executive.
2	23	Negotiate contracts with other corporations.

M-172: Organizational Management Structure

STANDARDS:

J	LM	
1	02	People producing products.
2	29	A creative atmosphere is reflected (creativity is exercised).
1	25	The world's acceptance of the products.
2	24	Financially profitable venture.
1	06	Happy kids.

TASKS:

NO	
25	Build a rapport between business and "creative" personnel.
31	Consult with staff at all levels.
01	Review goals and directions of Workshop.
06	Recommend modifications to goals and directions.
06	Recommend new functional organizational structures.
06	Implement new functional organizational structures.
29	Retain field contacts.

33	Troubleshoot business-related problems for Workshop.
01	Assess other organizations.
21	Assess potential staff members.
24	Approve all new staff.
31	Provide financial as well as legal advice to Workshop.
24	Oversee operation of all business departments.
25	Determine policy within Workshop.
24	Assess new products of Workshop.
06	Continually assess current management structure.
26	Provide opportunity for Workshop staff to get into field.
25	Provide solutions to other staff needs.
27	Continually assess staff needs.

ENABLERS:

S	UV	
1	05	Knowledge of TV production operations.
1	06	Knowledge of business principles.
1	06	Knowledge of business operations.
1	04	Background in business administration.
1	04	Background in pre-law.
1	06	Many years experience in business within TV.
1	06	Understand support operations.
2	29	Creating productive tension.
3	17	A feel for new staff members' commitment.
2	24	Direction setting ability.
1	08	Knowledge of CTW goals and directions.

M-173: Planning for Future CTW Development

STANDARDS:

J	LM	
1	02	People producing products.
2	29	A creative atmosphere is reflected (creativity is exercised).
1	25	The worlds' acceptance of the products.
2	24	Financially profitable venture.
1	06	Happy kids.

TASKS:

NO	
25	Build a rapport between business and "creative" personnel.
31	Consult with staff at all levels.
01	Review goals and directions of Workshop.
06	Recommend modifications to goals and directions.

06	Recommend new functional organizational structures.
06	Implement new functional organizational structures.
29	Retain field contacts.
33	Troubleshoot business-related problems for Workshop.
01	Assess other organizations.
21	Assess potential staff members.
24	Approve all new staff.
31	Provide financial as well as legal advice to Workshop.
24	Oversee operation of all business departments.
25	Determine policy within Workshop.
24	Assess new products of Workshop.
06	Continually assess current management structure.
26	Provide opportunity for Workshop staff to get into field.
25	Provide solutions to other staff needs.
27	Continually assess staff needs.

ENABLERS :

S	UV	
1	05	Knowledge of TV production operations.
1	06	Knowledge of business principles.
1	06	Knowledge of business operations.
1	04	Background in business admininstration.
1	04	Background in pre-law.
1	06	Many years experience in business within TV.
1	06	Understand support operations.
2	29	Creating productive tension.
3	17	A feel for new staff members' commitment.
2	24	Direction setting ability.
1	08	Knowledge of CTW goals and directions.

M-174: Information Dissemination

STANDARDS :

J	LM	
1	25	People have heard about "Sesame Street."
2	17	Request for speaking engagements are received.
2	17	Continuing request for news items are received.

TASKS:

NO	
01	Research topic problem addressed by dissemination effort.
24	Present idea or copy to be disseminated for review to project staff.

06	Implement or modify idea or copy for dissemination.
32	Enlist aid of community people in dissemination of information.
01	Assess other properties for their relative merit.
04	Write draft of information to be disseminated.
24	Observe to maintain an awareness of project activites and related activities elsewhere.
31	React to the various concerns of the project in relation to public image and publications pertaining to it.
01	Identify goals to be acheived.
03	Identify audience.
31	Field unscheduled events as they come along.
25	Interpret CTW policy.

ENABLERS:

S	UV	
1	04	Training along lines of political science and journalism.
1	06	Knowing what the needs of the media are.
2	14	An ability to write clearly and concisely.
3	02	A feel for what a particular audience can understand.
1	06	OJT as an editor of a newspaper column.
2	18	Identifying which information others provide that is usable.
1	18	Knowing what staff is capable of.

M-175: Text for Congressional Testimony

STANDARDS:

J	LM	
1	25	People have heard about "Sesame Street."
2	17	Request for speaking engagements.
2	17	Continuing request for news items.

TASKS:

NO	
01	Research topic problem addressed by dissemination task.
24	Research ideas or copy to be disseminated for review to project staff.
06	Implement or modify idea or copy for dissemination.
01	Assess other properties for their relative merit.
04	Write draft of information to be disseminated.
24	Observe to maintain an awareness of project activities and related activities elsewhere.
31	React to the various concerns of the project in relation to public image and publications pertaining to it.

01	Identify goals to be achieved.
03	Identify audiences.
25	Interpret CTW policy.

ENABLERS

S	UV	
1	04	Training along lines of political science and journalism.
1	06	Knowing what the needs of the media are.
2	14	An ability to write clearly and concisely.
3	02	A feel for what a particular audience can understand.
1	06	OJT as an editor of a newspaper column.
2	18	Identifying which information others provide that is usable.
1	18	Knowing what staff is capable of.

M-176: Speech Texts

STANDARDS:

J	LM	
1	25	People have heard about "Sesame Street."
2	17	Request for speaking engagements.
2	17	Continuing requests for news items.

TASKS:

NO	
01	Research topic problem addressed by dissemination task.
24	Present ideas or copy to be disseminated for review to project staff.
06	Implement or modify idea or copy for dissemination.
01	Assess other properties for their relative merit.
04	Write draft of information to be disseminated.
24	Observe to maintain an awareness of project activities and related activities elsewhere.
31	React to the various concerns of the project in relation to public image and publications pertaining to it.
01	Identify goals to be achieved.
03	Identify unscheduled events as they come along.
31	Field unscheduled events as they come along.
25	Interpret CTW policy.

ENABLERS:

S	UV	
1	04	Training along lines political science and journalism.
1	06	Knowing what the needs of the media are.

2 An ability to write clearly and concisely.
3 A feel for what a particular audience can understand.
1 OJT as an editor of a newspaper column.
2 Identifying which information others provide that is usable.
1 Knowing what staff is capable of.

M-180: Intra- Interagency Relationships

STANDARDS:

J	LM	
2	35	Approximately 100,000 copies of project objectives have been distributed, primarily on request.
2	34	Others are impressed that project objectives exist and are really used in coordinating production and test development.
2	16	Agencies are responsive to needs when complete information is given them.
2	34	Producers ultimately reflect an interest in achievement data (as well as appeal data) and express the desire to have a powerful instructional impact.
2	34	Producers reflect an unwillingness to compromise when facing a choice between appeal and instructional impact.
2	34	Producers reflect a desire to participate in designing research efforts, observing the data collection, and processing the data.
2	34	Producers reflect the need on their own initiative to occasionally observe children watching program productions.
2	34	Producers reflect an attitude that research provides a critical service to program production.
2	21	Sponsoring agencies continue to support project efforts.

TASKS:

NO	
02	Determine (with others) the relationship of the project to educational television.
02	Determine (with others) the relationship of the project to the whole area of early childhood education.
30	Consider the role of research in the area of publicity and information dissemination.
01	Weigh research priorities against the need to communicate to others (in light of small staff).
22	Describe the parameters for evaluation of the project (by a subcontractor).
29	Negotiate out suggested research questions having little meaning for project staff (e.g., black vs. white "gene-pool" questions).
29	Develop the attitude that research is a service to production.

29 Work with producers in relation to gaining "appeal" data which was high on their priority list.
29 Work with producers in demonstrating to them the relationship between the researcher method or gaining appeal data and their interests in terms of program salience.
29 Get producers to participate in the research methodology, asking their questions, observing data collection, helping process the data.
30 Identify ways of communicating effectively with producers.
31 Publish memoranda covering research findings.
31 Hold conferences with producers with research finding memoranda as the basis for the conference.
01 Review literature for normative data on target population in response to producer requests.
04 Build test items to produce the information requested by the producers, i.e., target population characteristics.
30 Establish policy and mechanism which would permit all project personnel an opportunity to provide inputs to production, programming, etc.
33 Formalize explicit organizational structure for the research effort on a functional basis as those functions appear.
31 Participate in meetings coordinating the efforts of research and production.
29 Resist attempts to address research questions not asked by producers to assure capacity to immediately respond and to continue to develop the producer's sense of need for research data.
32 See that project staff attending conferences get the right kind of billing for any presentations made.
30 Make sure that management and sponsors understand what research is doing, the nature of field research, and its contributions.
29 Make sure reading specialty groups understand what the project is doing, kind of research undertaken, amount of research, and the kind of curriculum being developed.
29 Specify that all labor done by the research department had to be relevant to other (project) departments.

ENABLERS:

S	UV	
3	34	A willingness to accept the expressed needs of producers as the basic focus of the research effort.
3	03	A sensitivity to the information needs of decision makers and other interested parties.
3	19	A sensitivity to the relatively unseen nature of the research work in order to identify areas needing visibility.
1	09	A knowledge of exactly what is going on in the research activity.
2	02	Must be able to communicate effectively with decision makers about the productivity of the research effort.
3	35	A sensitivity to the cost of gaining data without devoting enough time to careful communication of the data and its meaning.

M-181: Provided and Maintained Adequate Research Staff

STANDARDS:

J	LM	
2	15	Personnel on staff are self-starters.
2	15	Subordinate managers can readily define a significant research design that addresses a real, important production or curriculum question.
2	15	Subordinate managers can quickly conceptualize an experiment including implications for personnel and equipment.
2	20	Subordinate managers have a motivating effect on staff.
2	20	Subordinates interact well with subcontractors resulting in improved product quality.
2	15	Staff members in the field exercise initiative in testing the limits of situations in data gathering efforts.
2	18	Ability to write clearly and competently exists among the staff.

TASKS:

NO	
21	Specify criteria that candidate must be a person who wants to be a better researcher rather than a producer.
21	Consider the level of the legitimizing effect of project advisory groups in determining competency level of staff persons sought.
21	Consider previous experiences with staffing in relation to effects on morale of various staffing patterns.
21	Determine the need for a reading (content) specialist who can represent the reading project at professional meetings, congressional hearings, etc.
21	Interview candidates for reading specialist role in project.
21	Hire personnel meeting project requirements.

ENABLERS:

S	UV	
1	10	Knowledge of the effects on morale of previously used (and current) staffing patterns.
3	35	Sensitivity to the effectiveness of communication channels given a newly conceived organizational structure.
1	06	Knowledge of the legitimizing effect of the project advisory groups.
2	19	Skill at identifying divisions of labor based on the functions being carried out.

M-182: Relationships with Other Cities and Communities

STANDARDS:

J	LM	
2	20	Delicacy is exhibited when dealing with volunteers (in determining how a fit for mutual service might be made).
2	15	Project personnel respond immediately and appropriately to offers of help.
2	26	Project personnel reflect sensitivity to the needs of others and behave appropriately in terms of time, place, etc.
2	16	Community support is obtained in keeping with project goals.

TASKS:

NO	
30	Identify people and activities in various communities having relevance for project effort.
29	Show others what this project will do to further their efforts should they choose to cooperate.
21	Train personnel in ways of establishing working relationships with business and neighborhood communities.
21	Use role playing situations in training personnel for working in various inner city communities.

ENABLERS:

S	UV	
1	06	Must have a working knowledge of city structures.
1	06	Must have a working knowledge of city agencies, their functions, and scope of responsibilities.
3	10	A sense of how agencies actually function as opposed to the way they say they are functioning.
3	16	An awareness of what the trends are in the whole helping services field.
1	06	A working knowledge of the power structure of the cities.
1	06	A knowledge of the various ways of developing entrees into the city's power structure.
3	04	A sense of how to use available broadcast people to exploit (in the noblest sense) entrees into the city power structure.
1	06	A knowledge of how the city's educational system operates.
1	06	A public relations sense--understanding of the media, how to use it, who one should get to know within it, how to get them involved.
2	02	Must be able to deal with "grass roots" level (inner city) as well as the "establishment" level.
2	02	Must be at ease and at home in both the "grass roots" (inner city) and "establishment" environments.
3	16	Must have a sensitivity to the issues raised when one brings differing cultural units together for a cause.

3 01 Must be aware of the worth of others regardless of circumstances or situations.
3 03 You have to believe in a given person's abilities and concern for their child or children.
2 02 Must be warm and outgoing, with a sense of humor.
2 02 Must be mentally agile enough to know how to side-step potentially explosive questions.
3 37 Must be willing to "multiply" yourself by getting others involved.

M-184: Training of Production Staff

STANDARDS:

J LM

2 30 Little or no turnover in production staff.
2 31 Voluntary overtime put in evenings and weekends.
2 26 General esprit-de-corps and attention to quality.
2 04 All tasks done well and on time:
 (a) each person keeping his own responsibility area covered;
 (b) if someone is ill, no work remains undone, as others do it.

TASKS:

NO

28 Assign each staff member to job he can do with present skills.
22 Describe all the requirements of the job to the person assigned.
24 Supervise person closely for first few weeks, but let them do the jobs themselves.
26 Discuss each error the person makes, and each thing that goes right, in terms of quality, educational value, time lines, appropriateness to rest of show.
25 Allow staff to set own hours as long as work done well and on time.
26 If person's work is late or inadequate, give extra supervision and discussion, set work hours if necessary.
26 Train person to do next more difficult task by asking them to make the decisions that task requires, then discussing the answers.
26 Assign each staff member at least one week in each production area so he can become acquainted with all tasks.
22 Schedule all training efforts early enough to provide competent staff when needed.
26 Work to develop awareness of educational implications of each production task.
26 Teach each trainee about the overview of the project so they can identify with total task.
26 Instill attitude of excellence-seeking in all staff regardless of task.

ENABLERS:

S	UV	
1	24	Knowledge of all production tasks in order to assess skills needed to do each.
1	10	Knowledge, from past experience, of how long it takes most people to learn a particular task in order to schedule training sessions.
2	01	Skill in supervising trainee in way which allows him to learn from his own efforts, but gives him all the technical support he needs.
2	37	Skill in assessing trainee growth and new competencies, in order to assign him to new task or production area when he is ready.
2	01	Skill in discussing the ingredients of tasks and decisions, so other persons can learn by discussion as well as by doing.
2	01	Skill in discussion of errors of any kind, so person can learn WHY it is wrong as well as that it is wrong.
3	03	Sensitivity to person's feeling of adequacy or inadequency, in order to provide feedback that keeps up morale.
3	01	Sensitivity to philosophical attitude of persons toward work, in order to provide needed level of supervision of hours, etc.
3	33	Sensitivity to level of understanding of need for excellence in each task, as it affects educational quality of final product, in order to provide needed discussion.

M-185: Storage and Handling System for Films and Video Tapes

STANDARDS:

J	LM	
1	12	Any piece of material is available for reuse or copying on demand.
1	27	Physical conditions of material remain constant thru proper use of facility.
1	12	Service needs of other people (production crews) are met promptly and fully.
1	12	Full set of masters of all shows are available at all times at Ann Arbor.
2	07	Tape reuse is noted so video tape can be discarded when too worn for quality performance.

TASKS:

NO	
04	Have lists made of all materials produced at CTW from beginning.
04	Sort according to kind: inserts, films, tapes, studio segments, entire recorded show.
22	Send masters of all complete shows to NET Storage at Ann Arbor, Michigan.

23	Arrange for temperature and humidity controlled space at Ann Arbor.
23	Arrange for temperature and humidity controlled space at 81st Street studio.
22	Develop system for coding tapes to show how many times they have been used.
22	Help assistant develop card file of all material to be included in inventoried store.
02	Help assistant develop objectives for the service to be provided to others by the use of the inventoried store.
22	Help assistant develop labeling method for each unit to be stored.
21	Select assistant to become video tape librarian.
21	Train assistant as video tape librarian.

ENABLERS:

S	UV	
1	07	Knowledge of all types of materials produced by CTW, in order to make lists of each type.
1	24	Knowledge of previously used labeling and filing systems, in order to use the strength of what has been done and people are used to, but fix weaknesses.
1	04	Knowledge of the temperature and humidity requirements for storage of film and tape in order to secure proper facility.
1	24	Knowledge of production techniques, in order to understand needs for film reuse, wear, etc., and to develop service objectives.
2	19	Skill in organizing information, in order to assist in the development of a card file system.
2	01	Skill in training another to take over responsible job which demands meeting needs of other persons.
3	02	Sensitivity to personal attributes which showed that the person selected had "topped out" in his previous task and could handle film library job.

M-186: Procurement of Technical Equipment and Facilities

STANDARDS:

J	LM	
2	32	All needed equipment and facilities available when needed.
2	13	All needed equipment and facilities provided within budget.

TASKS:

NO	
23	Get specifications from production people.

23 Scout around town for each needed items: find and compare prices.
23 Decide which alternative is cheapest and best (balance).
23 Dicker with person from whom facility or equipment is wanted, in order to get it as cheap as possible.
23 Decide which sort of work can be contracted out cheaper than facilities and labor can be provided inhouse.
29 Get to know suppliers of equipment and facilities in order to be kept aware of changing possibilities.
23 Let lots of people know what is being sought, in order to have people come up with possibilities, keep prices down.
23 Discuss with production people possibilities for different sorts of equipment to meet need, to select most economical.
22 Discuss with production people possibilities for double uses of equipment or facilities to reduce need.
22 Look into future to determine needs, in order to list recommendations to top management.
30 Offer recommendations to top management about long term facilities and plans which are possible, economical.

ENABLERS:

S UV

1 24 Knowledge of production tasks, in order to be sure they have listed all needs, are considering possibilities, etc.
1 22 Knowledge of production equipment and facilities in order to be able to assess usefulness, economy of choices.
2 23 Skill in negotiating with suppliers of equipment and facilities in order to get lowest price.
2 26 Skill in keeping lots of contacts with lots of people fresh and active to stay current with market.
2 22 Skill in projecting changing needs in order to plan ahead on looking for facilities (good guessing).
3 19 Sensitivity about which issues to decide alone, which to go to production people or top management with.
1 09 Knowledge of production schedules in order to have everything available when needed.
1 11 Knowledge of working budget, in order to be sure costs are kept within necessary limits.
2 30 Skill in thinking of alternatives when seeing need cannot be met in terms of time lines or economy.

M-187: Staffing of Production Development Departments

STANDARDS:

J LM

2 17 Candidate is excited about the idea of using commercial television techniques to teach a curriculum.

2 36 Candidate has some knowledge or understanding of the curriculum goals of the project.

2 36 Candidate has demonstrated some skill in television entertainment programming--in previous work.

2 36 Candidate background is somewhat relevant to the job/task.

2 36 Candidate indicates he can learn quickly.

2 14 Intuitive feeling about a candidate--feel as if could work successfully with the candidate.

2 26 Candidate is able to accept the primary concept or premise of the project and agency--entertainment is primary focus with concealed educational intent.

2 36 Samples of candidate's work somewhat reveal comedy and/or entertainment value and/or creative input/ability.

2 26 Writer is willing to be dominated by the curriculum of the project but can still think/write funny material.

2 36 Candidate has a pleasure--leans toward low-brow comedy.

2 36 Candidate has an active intellectual interest in the problem of getting a child to read and the related conceptual problems.

2 37 Staff members can adjust either to new or a variety of assignments.

2 14 Project Director feels very comfortable with the staff.

2 06 Ability of a staff member to rapidly complete a job/task without disrupting other jobs or tasks.

2 13 Candidate can do his particular kind of work within our budgetary limits.

TASKS:

NO

21 Inquire of other staff members in the agency for potential staff for the project.

21 Identify potential staff by way of knowing or being familiar with their work, i.e., people within the agency.

21 Read resumes which had been sent to the agency relative to the project--resumes came in after project had been announced in the newspaper--to determine kinds of shows people have been working on, what duties have been.

21 Inquire of agents to identify potential writers.

21 Inquire of people in TV business as to suggestions for writers.

21 Interview potential staff members.

21 Explain the project curriculum to the candidate.

21 Asked candidate (writer) if he was still interested and felt challenged--given the type of job and rather penurious salary.

21 Hire writers on a week-to-week basis until it can be concluded that it is a comfortable and productive working relationship.

21 Inquire of a candidate's ambitions--where would he candidate. like to see himself in a few years and why, and how he has gotten where he is now.

21 Inquire of candidate's enthusiasms.

21 Compare with supervisor before hiring a staff member--usually for opinion or advice about a particular candidate.

22 Consider budget in terms of how many staff can be hired within budgetary limits of the project.

21 Consider basic staff needs of the project in terms of how many production staff, writers, etc. to hire to produce the show.

21 Review samples of candidate's work to judge whether or not the type of work may fit into the needs of the project.

21 Tell about preferences (interviewer's) in terms of TV programs to stimulate agreement/disagreement to get some reading/indication of candidate's tastes.

ENABLERS:

S UV

1 04 Knowledge of all aspects of television production— comes from experience.

1 08 Knowledge of reading curricula--to be able to assess the candidate's speed with which he (candidate) picks up what is meant by a reading curriculum--to be able to assess a candidate's enthusiasm for learning about the project curriculum.

3 25 Sensitivity as to how easily a candidate might adjust to new assignments.

M-188: Staffing of Production Department (other than studio)

STANDARDS: No information collected under this heading.

TASKS:

NO

21 Hire key people of production crews.

21 Assist in selecting cast members of television shows.

ENABLERS: No information collected under this heading.

M-189: Plan for Non-Broadcast Program

STANDARDS:

J LM

2 28 Companies are willing to accept CTW as a coventure in the development and manufacturing of nonbroadcast products, i.e., CTW will have control over product design and manufacture not a strict licensing operation.

2 36 Company's marketing/distribution patterns extend well into the inner city area.
2 36 Company has good product quality control.
2 24 Company can manufacture a good/quality product for little money.
2 36 Company has an adequate sales force to handle the marketing of a product within the territory they claim to cover.
2 36 Company has a good financial and credit standing.
2 36 Company (some) has capacity for sales organization in other countries outside the U.S.
2 36 Company (some) has marketing capacity in school and/or library area.
1 15 Product will sell at a low retail price--within price range of the inner city individual.
1 15 Products (some) can be bought (by CTW) to give away.
1 15 Product is a new/original product--not an adaptation/modification of an existing product.
1 01 Product has some educational value.
1 01 Product furthers the goals of the Workshop.
1 01 Product design is creative.
1 01 Product is well designed.
1 11 Graphics of the product are good fun, exciting, splashy, modern.
1 01 Product has motivational value for a child, i.e., a child will want to use the product.
1 05 Product can be (but doesn't necessarily have to be) used by the child individually.
1 12 Product achieves its intended goals--instructional, entertainment, etc.
1 15 Product is safe for the child to use.
1 01 There is a payoff in terms of the product for the user--has to be fun; user is able to correct himself.
2 24 Additional revenue is brought in to the Workshop.

TASKS:

NO

23 Evaluate a company in light of the Workshop's goals.
23 Determine whether or not a company's intents or goals are/could be congruent/compatible with the Workshop's goals.
23 Determine the different types/kinds of nonbroadcast materials that could be produced.
01 Establish a priority of nonbroadcast materials to be produced.
Develop some broadcast-related materials and activities to further the goals of CTW and bring in additional revenue.
Decide whether or not to hire a lot of people who had had experience in the field.
01 Decide whether or not to be exploratory to determine some new approaches.
22 Meet with different groups of people from all different fields.
02 Explore different possibilities of product types, i.e., books, toys, games, etc.
29 Talk to manufacturing companies regarding product, product development, marketing, etc.

02 Listen to all ideas other people may have in terms of directions or products we might develop/pursue.

23 Explain, in a broad sense, what our goals are in relation to the show.

33 Consider the establishment of a core or idea group which would operate in a seminar situation periodically to suggest design, product ideas, etc.

01 Determine which goals or aspects of the show cannot easily be presented through the medium of television.

26 Consider the framework of the Workshop's contractual arrangements with the staff--royalty, residual agreements.

33 Decide to go into a coventure with companies instead of engaging in a strict licensing operation with a company.

03 Input ideas, along with a company, as to the design and development of a product.

23 Look at a company's marketing patterns and abilities.

23 Look at a company's financial standing--and line of credit.

23 Look at a company's catalog to determine if the company produces and displays in a catalog with which CTW would not want to be associated.

23 Look at the other products a company produces.

23 Evaluate a company's ability to produce quality products in terms of design, creativeness, graphics, safety, and achievement of intent/goals.

23 Decide which company/companies to invite/approach to engage in a coventure production operation.

23 Evaluate a company's abilities/mode of operation in relation to other companies one might want to deal with.

ENABLERS:

S	UV	
1	25	Know resource people or specialists that one can call on for advice/suggestion to a particular question/problem.
1	04	Know, in general, contracts--the kind of business arrangements one wants to engage in.
3	16	Sensitivity or feel for the total market, whether it be juvenile books, toys, games, etc.
1	06	Know what products are generally available on the market.
		Know the strong points of various companies in terms of a market area (books, toys, games, etc.)
1	06	Know the reputations of various companies.
1	06	Sensitivity or feeling for juvenile related materials/products.
3	30	Know children in terms of their needs, likes, what they generally want to do at certain ages and what they are capable of doing at certain ages.
1	05	Have a positive attitude toward children--don't think of them as miniature adults, pests, problems, or subhuman beings.
3	01	Ability to communicate with children.
2	02	Artistic/creative/graphic ability--tools that combine with a desire to communicate with children.
3	04	Ability to present material logically--so child isn't confused.
2	33	Know or work out your goals in terms of the product--once you are clear about your goals, then can help children become clear about their goals.

CASE PROFILE NO. 20

Written by
R. E. Myers

PROJECT TITLE: The Assessment of Exemplary Reading Programs

(AIR Project)

AN EDUCATIONAL DIFFUSION PROJECT CONCERNED WITH: Providing information about relevant, exemplary reading programs throughout the country that can serve as sites for observing educational programs of demonstrated effectiveness.

A PROJECT OF: The American Institutes for Research
in the Behavioral Sciences
P.O. Box 1113
Palo Alto, California 94302

This profile has been prepared according to

PROFILE FORMAT No. 1

Three profile formats are represented in this volume. The reader should refer to this number when making use of the reader's GUIDE to the profiles.

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Chapter I: Overview

This chapter contains a narrative introduction to the Exemplary Reading Programs Project, including the objectives, rationale, and significance of the project and the context in which the project operates.

Synopsis of the Project

Title: The Assessment of Exemplary Reading Programs.

Responsible Institution: American Institutes for Research in the Behavioral Sciences.

Funding Source: U.S. Office of Education.

Funding Duration: April 27, 1970 to April 26, 1971. (12 months)

Observation Date: December 1970.

Present Stage of Development: Mid-Project. (late stages)

RDD&E Focus of Project: Primarily educational diffusion, but with a secondary focus on evaluation.

Expected Outcomes:
1. Ranking of reading program projects by category as candidates for exemplary visitation sites.
2. Program descriptions for 50 exemplary reading programs (abstracts and detailed treatments).
3. Program descriptions for 30 childhood learning programs (abstracts and detailed treatments).
4. Recommendation of procedures to facilitate visits by educators to exemplary sites.

Level of Funding and Duration: Medium-Low. (level 3 of 7 levels)

Agency Setting: Private nonprofit organization, categorized as private industry.

Setting of Primary Location of Work Efforts: Field sites of reading programs.

Staff Summary (Current):	Professional	Support
Total Full Time equivalency (man years):	11.75	2
Number of Personnel Assigned:	13	4

Professional Specialities of Staff (interviewees only): cultural anthropology, English, business administration/language arts, psychology/education, speech/psychology.

Objectives, Rationale, and Significance of the Project

Educators throughout the country are growing increasingly aware of the need to make firsthand observations of relevant educational programs of demonstrated effectiveness. This concern has become so intense and widespread that programs which are publicized run the risk of being overburdened by visitors. As a consequence, the directors and staff members of innovative programs are becoming more and more cautious of visitors even though they recognize the major value of judicious site visiting and are often visitors to other programs as well.

The importance of increasing communication among educators and expanding the opportunities for firsthand observations of promising educational programs is critical. However, for the obvious benefit of both the educators being visited as well as the visiting educators, assistance is needed in both selecting programs to be visited and in the planning and conducting of site visits. Two major problems underlie these areas: (a) identifying appropriate programs for site visitation and (b) providing an optimum strategy for preparing, conducting, and assessing site visits to these exemplary programs. The proposal to assess exemplary reading programs throughout the country was submitted in response to this need.

The original proposal was not funded as it was submitted. Two significant changes were made before the project was launched. First, the scope of the original proposal was broadened to include 50 site visits instead of 30, and the duration of the project was extended from four months to one year. The second change occurred when the sponsor requested an additional 30 reports of childhood learning programs for the White House Conference of Children held in December 1970. (Six appropriate reading programs were to be utilized in both the White House Conference reports and the exemplary reading programs reports.) Thirty documented programs for the White House Conference, then, necessitated 48 additional site visits for the project personnel.

In addition, 18 site revisitations for audio-visual documentation were proposed by the funding sponsor for use in the White House Conference. Scripting, technical writing, and editing were to be performed by one subcontractor, and another subcontractor was to provide the technical equipment.

Context in Which the Project Operates

Relationships to parent agency. To understand the working relationships at the American Institutes for Research (AIR), it is necessary to also understand its organizational structure. (See Figure 1). The Palo Alto branch of AIR has as its descriptive title the Center of Research and Evaluation Application of Technology in Education (CREATE) and according to the Project Director, "that's what the Palo Alto office is all about." Under that general theme are three institutes, analogous to divisions in universities. There is an Institute for Behavioral Research, an Institute for Individual Educational Development, and an

Institute for Research in Education. Within an institute, programs will be found which are target areas of ideas. Within AIR, people are free to move from program area to program area as dictated by staffing needs. In the Institute for Research in Education, there is a Social and Educational Program, an Instructional Methods Program, and a Behavioral Science and Research Program. Within a program, there might be from one to five "projects." In AIR's terms, a project is a contract for a specific application of research, and a program is a collection of people who may or may not be assigned to a project. A person's time can be charged either against a project or against a program.

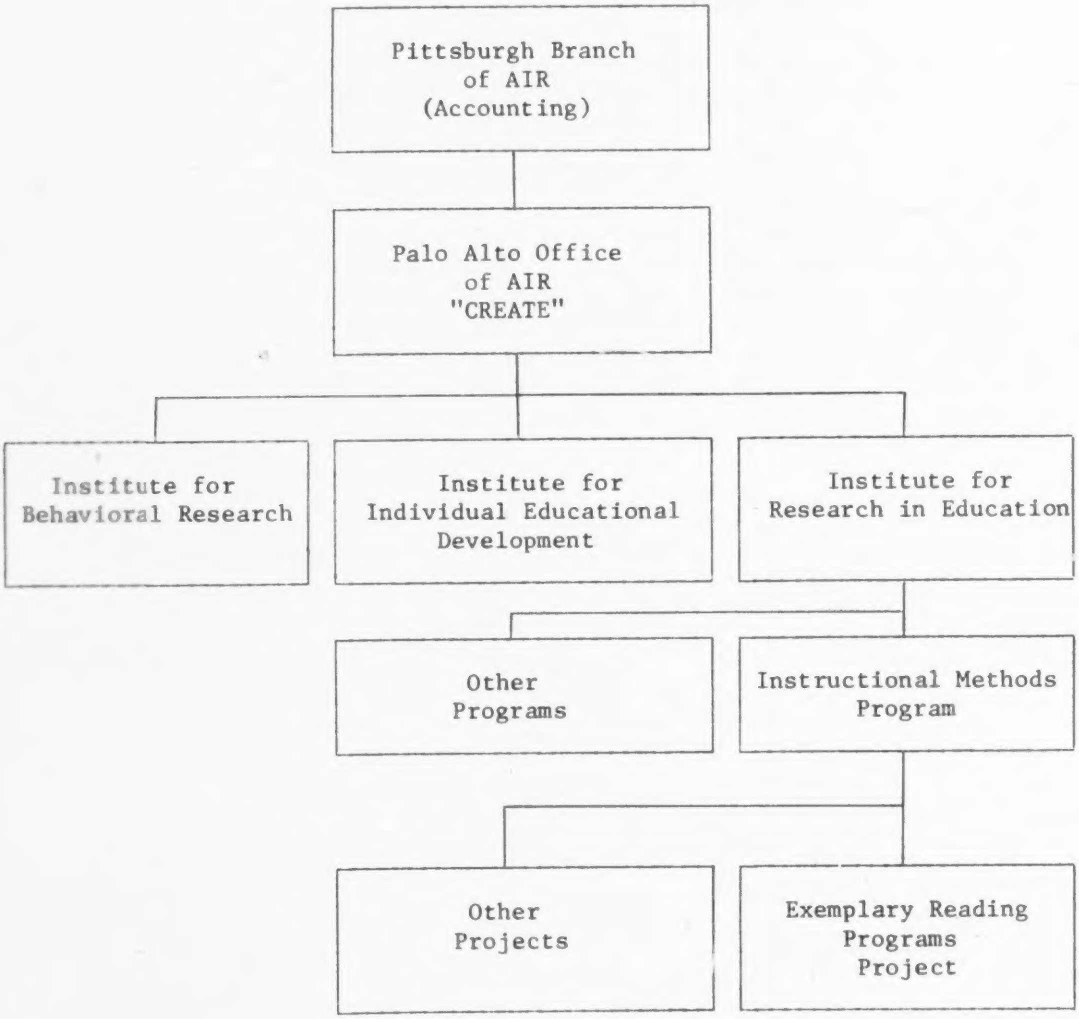
Pittsburgh Branch of AIR (Accounting)
Palo Alto Office of AIR "CREATE"
Institute for Behavioral Research
Institute for Individual Educational Development
Institute for Research in Education
Other Programs
Instructional Methods Program
Other Projects
Exemplary Reading Programs Project

FIG. 1. Contextual map.

Relationship to other efforts of an overall program. The Assessment of Exemplary Reading Programs (incorporating the White House Conference report on exemplary childhood learning projects) stems from two other AIR projects. In a number of important respects, it is the offspring of Project PLAN and A Study of Selected Exemplary Programs for the Education of Disadvantaged Children. PLAN (A Program to Develop and Evaluate a System of Education) provided the personnel and the motive for this project, and the Exemplary Programs for the Education of Disadvantaged Children Project provided the methodology. Many of the PLAN personnel assumed responsibilities for this project when it was operationalized.

Because procedures and instruments had been developed for the Exemplary Programs for the Education of Disadvantaged Children Project which might easily be adapted for this similar project, it was both natural and logical for it to be patterned in many ways after this "parent." Specifically, the questionnaire which was used to gain information on the selected sites was originally developed for the earlier project.

Physical/environmental setting. AIR's Palo Alto office is one of five that are found in the United States and the Orient. It is situated in rolling hills some eight miles west of the business section of Palo Alto. The office consists of three buildings in close proximity, connected by ramps and walkways. They are located in open, airy work spaces, occupying semiprivate, carpeted offices that feature windows looking out on the countryside. Traffic in the building is light, there is ample filing and storage space, and AIR's library is located in this same building. The project staff communicate with one another quickly and easily since most are located in offices that are in one section of one floor of the building.

Chapter II: Parameters of the Project

This chapter discusses the staffing pattern of the project, descriptions of the products being produced, and an index of management responsibilities.

Project Structure

Staff structure. The organizational structure of the Exemplary Reading Programs Project is presented in Figure 2. This figure indicates that the Project Coordinator interacts with staff members, the editorial specialist, and the coordinator of the project's financial records. The Project Director is kept informed of the progress of various phases of the project, but he also encourages staff members to interact with him directly. The Editorial Specialist, generally speaking, is the person who communicates with the sponsor regarding the reports submitted by the project. Support staff of AIR and subcontractors are called upon from time to time to assist in generating the products of the project. Occasionally informed persons from within the agency are called upon to give advice or to help make decisions, but the need for consulting help is infrequent. Most of the advising and consulting for the project occurred at its inception.

The actual involvement of the interviewees with the project varied. One was assigned to the project on a half-time basis; one was 75% FTE[1]; and three devoted 100% of their time to the project. At the time of our visit, however, the person who was half-time on the project was about to leave and go on another project within AIR.

Project roster. During the week in which the data-gathering team was in Palo Alto, six project members were extensively interviewed. These interviewees included the Project Director, the former Project Coordinator, the present Project Coordinator, the Administrative Assistant, the Editorial Specialist, and one Writer-Interviewer. The person who was primarily in charge of producing the 12 audio-visual packages for the White House Conference was unavailable. Additionally, two senior persons who had been involved in writing the proposal were informally interviewed.

A project roster of staff involved in the study of exemplary childhood learning programs and the exemplary reading programs will be found in Table 1.

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[1] Full Time Equivalency

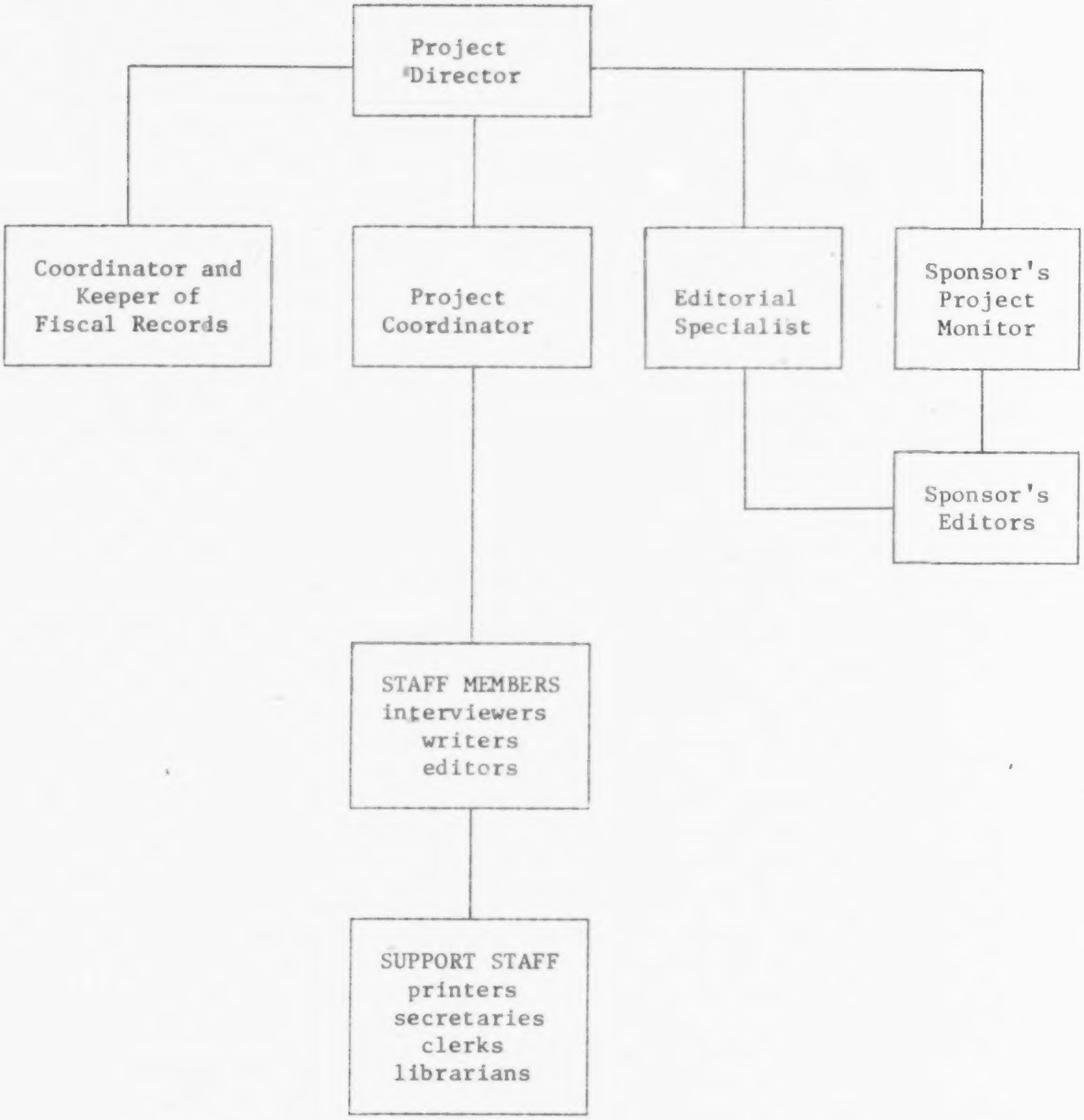
Project Director
Coordinator and Keeper of Fiscal Records
Project Coordinator
Editorial Specialist
Sponsor's Project Monitor
Sponsor's Editors
STAFF MEMBERS interviewers writers editors
SUPPORT STAFF printers secretaries clerks librarians

FIG. 2. Project organizational structure.

TABLE 1

Project Roster of Staff by Job Titles

Project Director*

Administrative/Clerical

- Administrative Supervisor**
- Senior Secretary**
- Technical Assistant
- Technical Assistant

Research Staff

- Project Coordinator*
- Research Scientist
- Research Associate*
(Editorial Specialist)
- Research Associate*
(Writer-Interviewer)
- Research Associate
- Research Associate
- Research Assistant*
(former Project Coordinator)
- Research Assistant*
(Administrative Assistant)
- Research Assistant**
(Writer-Interviewer)
- Research Assistant
- Research Assistant
- Research Assistant

* Formally interviewed

** Informally interviewed

Products Generated

Prior to interviewing, the data-gathering team prepared a preliminary product tree which identified 24 products of the project and the interrelationship between these products. Various project personnel were identified with each of these products, and interviews were conducted using these products as controlling themes. The majority of subproducts were for the purposes of selecting sites to be visited and training personnel to gather data. When the additional assignment of reporting about childhood learning programs for the White House Conference on Children was accepted, the procedures for selecting sites and training personnel were simply modified to meet the requirements of that part of the contract.

Index of products. The following products had been completed at the time of the site visit:

P-01. Site Assessment Criteria. The determination of criteria by which to judge whether or not projects featuring innovative reading programs should be included in this study was largely a matter of reviewing the criteria used by USOE in submitting to the project the original lists of 50 exemplary reading programs from the various states. Site visiting teams were trained in an understanding of the assessment criteria. The determined set of criteria is categorized as a subproduct with an "evaluation" focus.

P-02. Site Selection Criteria. After the list of proposed sites was assessed, it was necessary to determine whether the listed projects were still operative. As a result of this information, 10 of the original proposed projects were not visited. One factor that greatly influenced the selection of sites was whether or not there was a summer session for the reading program. Since the original list was not supplied to the project until May, there was very little time to make contact with the projects and visit the sites. Accordingly, if there was a summer school session for the reading program, there was a greater likelihood of a visitation. Another criterion was the age of the project. Projects had to be at least one-year old to qualify. In some cases there was very little information about a site and so the temporary Project Coordinator tried to learn as much as possible about the type of reading program being offered, the community, the kinds of children who were involved in the reading program, and (if possible) something about staffing and funding. This subproduct is labeled by the interviewing team as having an "evaluation" focus.

P-03. Validation Criteria for Data Collection. A "trial run" was made at two sites in New Mexico to determine whether or not the devised data collection procedures were effective. The criteria were generally confirmed to be appropriate for the purposes of the project. This was considered to be an "evaluation" subproduct.

P-04. List of Scheduled Sites. A tentative list of sites for visitation was arrived at after the trial run. Considerable modification of the original list was needed because of the lateness of the initiation of the project insofar as the school year was concerned. This subproduct was also labeled "evaluation" by the interviewing team.

P-05. Approved List of 45 Exemplary Reading Programs. The tentative list of reading program projects was reviewed by the sponsor, and a final list of 45 sites was approved. This was another "evaluation" subproduct.

P-06. List of Six Additional Reading Program Visitation Sites. For various reasons, some of the projects that were visited proved to be inappropriate for the purposes of the assessment. Additional sites had to be found, and most of these were visited in the fall. This was an "evaluation" subproduct.

P-07. Observation Techniques. Techniques that were employed in similar projects of the contractor were used in gathering information about the reading programs. Modifications were made of these techniques to gain the particular kinds of data required in this project. This was considered by the interviewing team to be a "development" subproduct.

P-08. Site Visit Checklist. While on the site, a checklist was used to make sure that important kinds of information were obtained. This product was developed by project personnel.

P-09. Site Visit Schedule. Dates were established for visitations to the various reading program project sites. This was labeled a "development" subproduct.

P-10. Team Rotation Plan. A plan was prepared for sending teams to the sites. From time to time the plan was altered. This plan was regarded as a "development" subproduct.

P-11. Prepared Questions. Questions were sent out to the sites prior to the visitations to obtain pertinent information about their reading programs. This was considered to be a "development" subproduct.

P-12. Telephone Interview Questions. About 10 questions were generated for the purpose of gaining critical information about the site. This was labeled a "development" subproduct.

P-13. Team Training Procedures. Procedures for training the interviewers in the use of the questionnaire and checklist were developed from other AIR programs. As stated this was a "development" subproduct.

P-14. List of 34 Additional Sites in Childhood Learning Programs. As a result of negotiations with the sponsor to report about childhood learning programs for the White House Conference on Children, arrangements were made to visit 34 additional sites. (Some of the reading program project sites were acceptable as sites for the White House Conference reports.) This additional listing was considered to be an "evaluation" subproduct.

P-15. Data Collection Protocol. Procedures and materials for handling data were formulated by the project staff. This was labeled a "development" subproduct.

P-16. Twelve Audio-visual Presentations of Exemplary Sites. In addition to reporting about the childhood learning program projects to the White House Conference, 12 audio-visual presentations were just being completed at the time of the observation. This was considered to be a "diffusion" subproduct.

P-17. Detailed Descriptions of Childhood Learning Programs (for White House Conference). The childhood learning program reports were also just being completed during the time of observation. This collection of reports was considered to be one of the focal "diffusion" products of the project.

P-18. Brief Reports of Childhood Learning Programs (for White House Conference). This collection of brief reports was labeled a focal "diffusion" product.

The following products were not completed at the time of our visit:

P-19. List of Ranked Sites. One of the outcomes of the project is to be a ranking of reading program projects according to criteria to be developed during the progress of the study. This is labeled a focal "evaluation" product.

P-20. Detailed Descriptions of Exemplary Reading Programs. The focal products of the study include the reports of the exemplary reading programs and the childhood learning programs. A large proportion of the efforts of the project staff has been devoted to preparing these reports. The reports with detailed treatments are being written in a more technical manner. This set of reports is labeled a focal "diffusion" product.

P-21. Brief Reports of Exemplary Reading Programs. These reports are to be summaries of the complete exemplary reading program reports. This group of reports is labeled a focal "diffusion" product.

P-22. Guidelines for Site Visits. In conjunction with the reports of reading program projects, guidelines for site visits of projects of a similar nature will be devised. This is considered to be a "development" subproduct.

P-23. Program Descriptions. This is the collection of all exemplary reading programs and constitutes the major "diffusion" product of the project.

P-24. Final Report. The final report of all findings of the study is to be presented to the sponsor at the conclusion of the project's funding period. This report is regarded as an "evaluation" product focus.

Product tree. Figure 3 is a representation of the final product tree. The product tree identifies the focus of each product, whether or not the product was completed at the time of observation, and an identification number arbitrarily assigned to each product.

Table 2 identifies the personnel associated with the various products. Some staff personnel who were involved in the project at one time are not listed in the table, even though previously they took part in bringing into being some of the products. Except for one individual, all of the persons listed were employed full time on the project at the time of the site visitation.

Management Responsibilities (Outcomes)

Index of management responsibilities. Table 3 is an indexing of all of the identified management responsibilities (outcomes) of the Exemplary Reading Programs Project by level and, where applicable, by category within level. The following is a listing of these outcomes:

EM-25.[2] Staff Awareness. An emphasis of management is on initiating and maintaining an awareness on the part of staff of the overall objectives, strategies, and procedures being followed by the project. The result of this set of activities is one of a staff knowledgeable about project intentions and strategies for getting there.

PM-26.[3] Refined Product Report Specifications. Satisfaction of aspects of the contractual commitment of the project requires adaptation of site tests and reporting formats as the project moves through time. This set of activities resulted in refined specifications that enabled the project to become operational.

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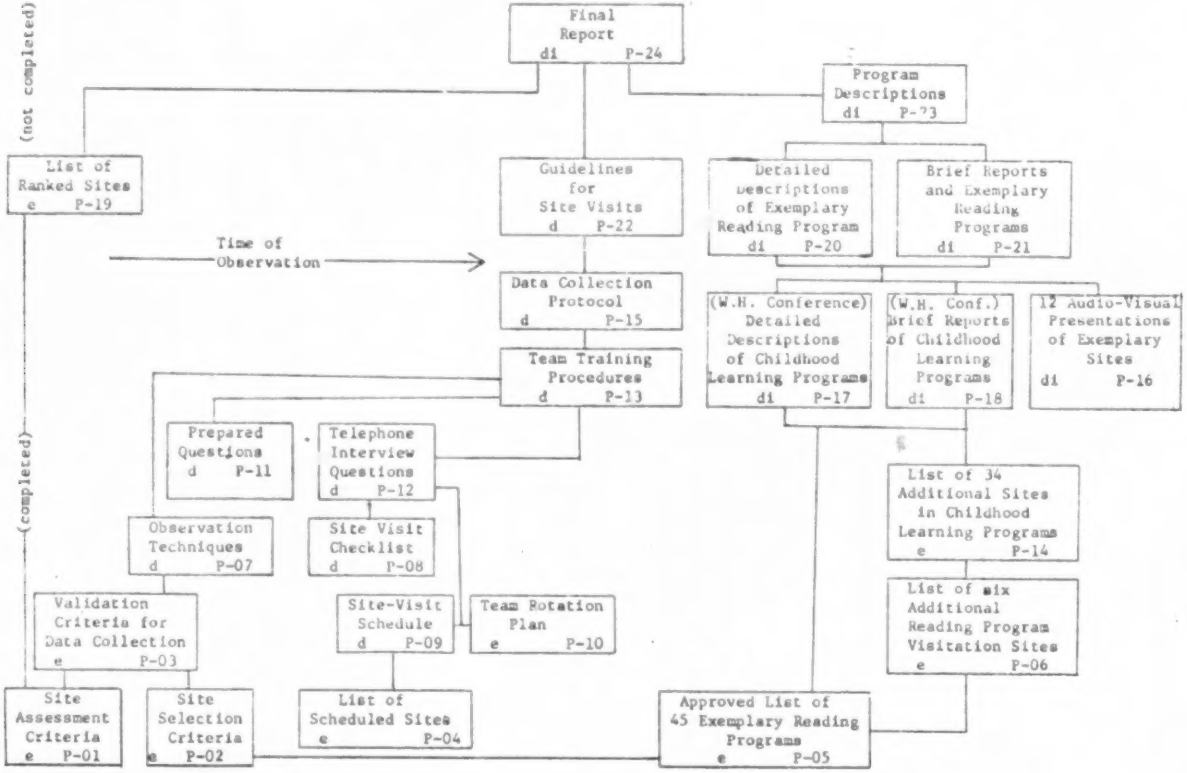
[2] EM identifies the outcome as one of serving environmental management within the project.

[3] PM identifies the outcome as one of serving production management within the project.


Final
Report
di P-24
Program
Descriptions
di P-23
(not completed)
List of
Ranked Sites
e P-19
Guidelines
for
Site Visits
d P-22
Detailed
Descriptions
of Exemplary
Reading Program
di P-20
Brief Reports
and Exemplary
Reading
Programs
di P-21
Time of
Observation
Data Collection
Protocol
d P-15
(W.H. Conference)
Detailed
Descriptions
of Childhood
Learning Programs
di P-17
(W.H. Conf.)
Brief Reports
of Childhood
Learning
Programs
di P-18
12 Audio-Visual
Presentations
of Exemplary
Sites
di P-16
Team Training
Procedures
d P-13
Prepared
Questions
d P-11
Telephone
Interview
Questions
d P-12
(completed)
List of 34
Additional Sites
in Childhood
Learning Programs
e P-14
Observation
Techniques
d P-07
Site Visit
Checklist
d P-08
Validation
Criteria for
Data Collection
e P-03
Site-Visit
Schedule
d P-09
Team Rotation
Plan
e P-10
List of six
Additional
Reading Program
Visitation Sites
e P-06
Site
Assessment
Criteria
e P-01
Site
Selection
Criteria
e P-02
List of
Scheduled Sites
e P-04
Approved List of
45 Exemplary Reading
Programs
e P-05

Legend of Product Focus Coding
r = research   di = diffusion
d = development   e = evaluation

FIG. 3. Product tree.

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TABLE 2

Identification of Products With Personnel Interviewed

FTE[a]	Functional Title	Product Number From Product Tree[b]
50%	Project Director	04, 15, 06, 14
50%	Former Project Coordinator	09, 10, 11, 12, 13, 17, 20
100%	Writer-Interviewer	17, 20
100%	Project Coordinator	04, 17, 18
100%	Administrative Assistant	17, 18, 20, 21, 23
75%	Editorial Specialist	17, 18, 20, 21

[a] Full Time Equivalency

[b] See Figure 3

TABLE 3

Responsibility Index

LEVEL I: FOCAL OUTCOME

Quality Products--program descriptions of exemplary reading projects and of childhood learning projects. (PM-30)

LEVEL III: INTERMEDIATE OUTCOMES

Production Management

Refined Product Specifications. (PM-26)
Efficient Manuscript Processing. (PM-32)

LEVEL IV: FOUNDATIONAL OUTCOMES

Production Management	Environmental Management
Work Assignments. (PM-31)	Staff Awareness. (EM-25)
Compatible Time-people Relationships. (PM-29)	Comfortable Decision-making Structure. (EM-28)
Compatible Work and Expenditure Rates. (PM-27)	

PM-27. Compatible Work and Expenditure Rates. The focus of management is on monitoring and maintaining satisfactory work progress in relation to the expenditure of funds for personnel to accomplish that work. Outcome: productivity of staff was in keeping with cost projections.

PM-28. Compatible Time-people Relationships. Management endeavors to maintain a realistic level of staff in relation to the time available for completion of various aspects of the project. This seems to be treated independently from PM-27 based on the assumption that personnel on staff are reasonably productive people. Outcome: sufficient staff to complete the tasks on time.

PM-29. Comfortable Decision-making Structure. Management behaviors are focused on the maximum possible delegation of decision-making authority in such a way that staff feels comfortable making such decisions. Outcome: staff made operational decisions as needed in order for production rates to be maintained.

PM-30. Quality Products. Management has attended to various dimensions of the project which directly influence the quality of products. The outcomes of the related set of activities resulted in project products meeting all known and assumed criteria for quality.

PM-31. Work Assignments. The focus is on the various management considerations when assigning project staff to specific work elements. The outcome of the related activities resulted in work assignments compatible with staff competencies, interests, and convenience insofar as possible.

PM-32. Efficient Manuscript Processing. The emphasis is on maximizing the effectiveness of the utilization of staff and support personnel in processing report manuscripts from unedited drafts through to sponsor approved final copy.

Management network. Figure 4 is a schematic of all management outcomes identified for this project, showing their hierarchical and interdependency relationships.

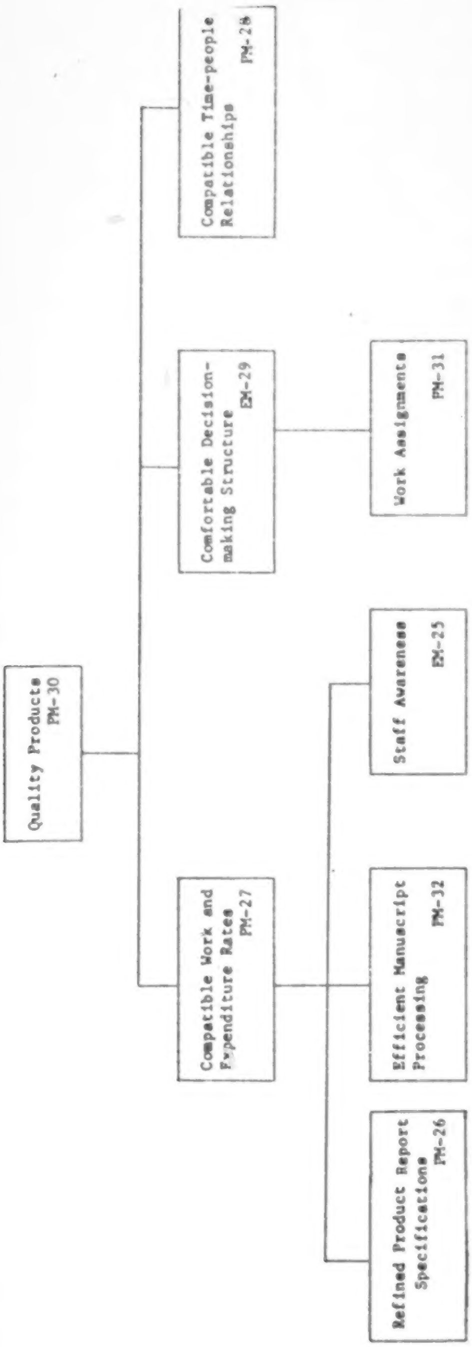
Quality Products PM-30
Compatible Work and Expenditure Rates PM-27
Comfortable Decision-making Structure EM-29
Compatible Time-people Relationships PM-28
Refined Product Report Specifications PM-26
Efficient Manuscript Processing PM-32
Staff Awareness EM-25
Work Assignments PM-31

FIG. 4. Management network.

Chapter III: Details on Each Production Responsibility

This chapter's contents comprise listings of the standards by which one judges the satisfactory completion of the product, the tasks required to generate a product meeting those standards, and the enablers (knowledges, skills, sensitivities) which facilitate the carrying out of those tasks. Also given are the frequencies with which the standards, tasks, and enablers were cited during the interviews and were associated with products.

Listing of Standards, Tasks, and Enablers

Inasmuch as the interviewing methodology tended to focus more upon tasks than products during the early stages of the study, some of the standards reported here refer to the tasks of the interviewee rather than to the product itself. In most cases, however, the connection between a standard and a product is obvious.

The following is a cataloguing of the standards, tasks, and enablers associated with the products which served as foci for the several interviews.

P-20: Detailed Descriptions of Exemplary Reading Programs
Level: Focal product
Status: In process

It can be seen in the list which follows that there were some known criteria for the acceptance of reports. Although these standards were not always made explicit with regard to quality, there were a number of occasions when the interviewees were able to specify elements of quality. When it came to the standards applied to the focal products of this project certain definite indicators came to the minds of the interviewees.

The similarity between the lists of tasks, enablers, and standards for the exemplary reading programs and the White House Conference reports on childhood learning programs emphasized the kinship of these two thrusts of the project.

Product Standards:

1. Acceptance by project editor and sponsor's editor.
2. "If they are ready for me when I come." (Refer to Task #1)

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3. "When they have calmed down." (Refer to Task #2)
4. Evidence from interviewee's behavior that he has calmed down. (Refer to Task #2)
5. If all topics are covered on questionnaire/checklist.
6. Agreement on both sides. (Refer to Task 3)
7. If all the topics on outlines for reports are taken care of.
8. "If there is enough material to write the report."
9. "I really like your notes." (offered by an editor)
10. "You really have added a lot of information." (offered by an editor)
11. "The topics are adequately covered."
12. "Conveys important points and flavor of (reading) program." (reading)
13. Whether report flows and is smooth.
14. Acceptance by sponsor's editors.
15. Meets all known requirements for content, appearance, line count, type styles, timelines.
16. Acceptance by other person who visited site.
17. Statement by person who did not go to site that report was interesting to read and made reader feel he understood described project.
18. Meeting all requirements for content, length (self-judged), style, readability.

Production Tasks:

1. Obtain information about site and reading program.
2. Obtain additional data from site about staffing, funding, testing, etc.
3. Determine, from proposal and discussion with sponsor, item content requirements for long manuscripts describing reading programs.
4. Blend the above with the writing style-book criteria to create a writer's guide.
5. Determine, through phone discussion with sponsor's editor, criteria for physical appearance of camera-ready copy.
6. Review, back at shop, all documents including interview form, to get overall picture of site.
7. Letter all documents in order to refer to them in an outline.
8. Organize all notes in order of prescribed format provided by sponsor's editor.
9. Prepare complete outline referenced to all lettered documents, notes, and questionnaire sections.
10. Call back to site to elicit any information that is missing when filling out a complete outline or when writing each section using annotated outline.
11. Write each section, using annotated outline.
12. Have others read for clarity, information, and completeness--refer it to one person who was on site, and one who wasn't on site.

13. In rewrite, incorporate useful suggestions made by others.
14. Submit completed write up for editing by project editor and sponsor's editorial staff.
15. Incorporate changes which are decided through negotiation with project and sponsor's editors to be necessary.
16. Rewrite entire or part of the manuscript, as is necessary to correct obvious errors, incorporating answers to questions.
17. Have original author read it for fidelity to site, program content, etc.
18. Prepare blue-line (invisible to camera) form for typist to type on for layout of camera-ready copy.
19. Transmit editing comments to writers with explanations, so they can make needed changes.
20. Rearrange section of report prepared by writers; with scissors and paste if necessary.
21. Route evaluation section to evaluator for checking or completion.
22. Telephone persons at the reading program site.
23. Interview project staff members about reading program.
24. Write detailed notes about reading program and site.
25. Confer with partner upon leaving site about the reading program and site.
26. Write detailed notes for the report of the reading program.
27. Convert notes into first draft report.
28. Interpret test data (evaluation) about reading program.
29. Read all available literature about site before going to site.
30. Do observations at site to gather data on site disruption, location, facilities.
31. Write notes on observations to be used later by self or others.
32. Contact local chamber of commerce for information on the community population type, size, facilities for room, board, travel.
33. Interview staff member at site, using prepared interview schedule, and answering all questions as completely as possible.
34. Collect any useful papers which are available on the site, for use later in writing report on site.
35. Telephone persons at site of reading program to obtain information about program.
36. Interview project staff members about reading program.
37. Write reports from sites about reading program.
38. Record information about reading program on site.
39. Confer with an editor about the report.
40. Rework report to get into completed form.
41. Read report on a site written by previous writer (after editors decided it must be rewritten) and all other documents on that site.
42. Make list of questions to be answered by previous author or by phone call to site.
43. Transmit format requirements for camera-ready copy to typists with notes about spacing, type styles, placement of headings.
44. Do gross editing for omitted sections and deviance from style requirements.

45. Monitor work of typists for timeliness and compliance to criteria in preparation of camera-ready copy.
46. See that materials list (of papers available from described site) is complete.
47. Create chart to track progress and location of each long and short report for each site, showing completion of rough draft, editing, rewrite, sponsor's editing, final draft, preparation of camera ready, submission of final product to sponsor's acceptance and dates to each step completion.
48. Maintain tracking chart by adding each new site selected, adding names to each step to show who's responsible, checking off each step as it is completed.
49. Transmit all new changes in format or content requirements to writers.
50. Negotiate with sponsor by phone, after they receive manuscript, about change in style, content.
51. Interface between sponsor and writers: transmit and translate changes the sponsor feels are necessary; work with both until each is satisfied.
52. Negotiate with sponsor the type styles for camera-ready copy.

Enablers of Production:

1. Knowledge of basic purpose of interview form, so vital questions are not skipped or left partially answered.
2. Knowledge of educational materials, theories, and methods to communicate with persons on site, and to evaluate results.
3. Awareness of what is normal behavior of children and what treatments are current in education field; to identify unusual features.
4. Knowledge of report format and content requirements from sponsor.
5. Knowledge of printing technology and languages; to work with print shop in developing blue-line forms.
6. Knowledge of type faces and sizes, to be able to talk with sponsor to determine how to meet their requirements most economically.
7. Knowledge of overall timeliness of project to create a monitoring system for things produced on time.
8. Knowledge of the people, equipment, and other circumstances of the site.
9. Knowledge of format of report (as done before by contracting agency).
10. Knowledge of various materials obtained from a project by interviewing team and in the mail.
11. Knowledge of psychology and psychological terms gained from college courses, self-study, and working with psychologists.
12. Knowledge of a site's personnel, services, equipment, etc.
13. Knowledge of testing methods and terms.
14. Ability to reassure or relax people on the site so that they will not distort information thru tension or defensiveness.
15. Skill in taking clear notes that can be read by self and others, working in whatever circumstances are available where interviewee works.

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16. Skill in selecting useful from irrelevant information, to help others understand the program to be described.
17. Skill in awareness of slight cues which can be followed to other possible information sources (e.g., casual reference to unheard of report, etc.)
18. Ability to interview in various ways, to meet the perceived needs of interviewees.
19. Ability to use interview forms (e.g., follow directions).
20. Skill in use of observation techniques, including making self physically unobtrusive.
21. Skill in deciding what would be useful to others who are trying to do a similar project.
22. Skill in general writing skills of clarity, interest, grammar, pacing; to keep report readable.
23. Organizing skills to arrange materials and monitoring systems for supervising flow of work.
24. Supervisory skills to work with typists, to make sure they understand what is wanted and get it done on time.
25. Ability to write style requirements for writers to work from; clearly enough so they are sure what is wanted.
26. Skill in editing, to review prepared manuscripts.
27. Skill in emphasizing critical areas of information needed for site visitation.
28. Skill in writing letter confirming appointment.
29. Skill in using questionnaire to get information about reading program.
30. Skill in listening to interviewees, to obtain desired information about reading program.
31. Skill in being intuitive about the program and its operation.
32. Skill in writing factual reports.
33. Skill in questioning with the use of the questionnaire for data collection.
34. Skill in "draft typing."
35. Skill in taking suggestions of editors and team members.
36. Skill in preparing project personnel for upcoming interviews.
37. Skill in use of information about site which is available before visit.
38. Skill in establishing rapport with interviewees.
39. Skill in being able to listen intelligently to interviewees.
40. Skill in interpreting technical terms (jargon).
41. Skill in using tape recorder.
42. Skill in taking notes during an interview.
43. Skill in writing factual reports.
44. Skill in discussing notes taken by both interviewing partners.
45. Skill in taking notes about reading program and site.
46. Skill in discussing matters with interviewing partner.
47. Skill in interpreting and reporting test data.
48. Skill in translating additional information into notes.
49. Skill in sensing when persons are defensive or uncertain, needing help or information before they can be useful informants.
50. Perceptive about type of person being interviewed, to adapt interview style to that person's needs.
51. Sensitive to the tone of report, to keep tone desirable.

52. Sensitive to when information is essential for understanding, or is redundant; to keep report both complete and short.
53. Ability to sense when to deviate from form to elicit information that is felt to be present but not readily forthcoming.
54. Ability to indicate feeling of enthusiasm about the project being described in order to support staff in their endeavor.
55. Ability to negotiate inoffensively for elimination of inconsistencies in sponsor's requirements.
56. Sensitivity to interpersonal skills to use in working with writers when changes are necessary, so they can accept need for changes.
57. Sensitivity to anxieties by the project personnel about costs and budget.
58. Sensitivity to the possibility that the interviewer may make unwarranted assumptions.
59. Sensitivity to the fact that perceptions vary among people.

P-21: Brief Reports of Exemplary Reading Programs
Level: Focal product
Status: In process

Perhaps more specific before-the-job enablers were requisite for the project editor than for any other staff member. Much of what was needed to perform that role had to come from prior experience, although a good deal was learned during the first stages of the project's development. In contrast, most of the other staff members engaged in the tasks leading to the production of the White House Conference reports and the Exemplary Reading Program Projects reports were not expected to have specialized or technical skills to any great degree before they were assigned to the project.

Product Standards:

1. Product complies with all stated format specifications.
2. "Looks good" to editor, satisfies esthetic, self-established criteria.
3. Product is accepted by sponsor project monitors.

Production Tasks:

1. Read proposal and discuss with sponsor to determine component list and style criteria for final brochure.
2. Blend the above with writing style to provide consistent guide to writers.

3. Determine, through discussion with sponsor, the criteria for physical appearance of camera-ready copy.
4. Prepare blue-line (invisible to camera) form to guide typists for layout of camera-ready copy.
5. Transmit editing comments to writers and explain so they can make needed changes.
6. Prepare model and cue sheet (1st word of each line) for typist to use.
7. Develop cue word method for typist to use to minimize supervision of typing of camera-ready copy.
8. Do gross editing, for omitted sections, deviance from absolute style requirements, overall length.
9. Monitor for timeliness and compliance to criteria rewriting and preparation of camera-ready copy.
10. Transmit style and content requirements to writers.
11. Negotiate with sponsor by phone, after they receive copy of manuscript draft, about changes in style or content.
12. Interface between sponsor's editors and project writers--transmit and translate sponsor's comments and recommendations for change until satisfactory to both parties.

Enablers of Production:

1. Knowledge of purposes for and use of style books, to prepare one which is a blend of sponsor requirements and commercial standards for writers to use.
2. Knowledge of printing technology and type styles, to be aware of what is possible, and to transmit request to printers.
3. Skill in detecting inconsistencies in style, logic, and data.
4. Skill in editing (checking for compliance with style and length criteria) to do first gross editing of manuscript.
5. Ability in interpersonal skills in transmitting editoral changes from self or sponsor to writers, to prevent defensive behavior and to get job done right.
6. Skill in technical knowledge of style and format criteria, to use when negotiating with sponsor's editor.
7. Skill in mathematics to be used to divide lines by pages available, to fit format requirements.
8. Skill in organization, to be used to develop and maintain processes for monitoring the progress of many products at the same time.
9. Sensitivity to negotiate resolutions of inconsistencies with sponsor, by being aware of minimal cues regarding where they will give in and where they won't, in order to require as little change in the manuscript as is possible.
10. Tact in telling writers why a format requirement must be met, to assure their cooperation and compliance.
11. Visual sense to see when spacing looks good, to prepare an esthetically acceptable product.

P-17: Detailed Descriptions of Childhood Learning Programs (for White House Conference)
Level: Focal product
Status: In process

Except for one important ability, the enablers necessary to carry out the tasks involved in producing the detailed descriptions of the childhood learning programs are the same as those required to carry out the tasks for producing the exemplary reading program reports. That one ability is to be able to write in a journalistic fashion. The White House Conference reports were to be more readable and not so full of jargon. It turned out that some of the persons assigned to writing the reports had the ability to write in this fashion, but others did not. The lists of tasks and enablers for the White House reports are quite long because the White House Conference reports were developed over a period of several months and required the concerted efforts of all the project staff.

Product Standards:

1. "If they are ready for me when I come." (Refer to Task #1)
2. "When they have calmed down." (Refer to Task #2)
3. Evidence from interviewee's behavior that he has "calmed down." (Refer to Task #2)
4. If all topics are covered on questionnaire/checklist.
5. Agreement on both sides. (Refer to Task #16)
6. "If there is enough material to write the report."
7. "I really like your notes." (offered by an editor)
8. "You really have added a lot of information." (offered by an editor)
9. Meets all known requirements for content, appearance, line count, type styles, timelines.
10. Is accepted by sponsor's editing staff.
11. Acceptancy by project editor and sponsor's editor.
12. Acceptancy by other person who visited site.
13. Statement by person who did not go to site that report was interesting to read and made reader feel he understood described project.
14. Meeting all requirements for content, length (self-judged) style, readability.

Production Tasks:

1. Request by letter information about reading program and site.
2. Gain information about project and site through conversations, written information, etc.

3. Determine, from proposal and discussion with sponsor, item content requirements for long manuscripts describing reading programs.
4. Blend report format with writing style-book criteria to create writer's guide.
5. Determine, through phone discussion with sponsor's editor, criteria for physical appearance of camera-ready copy.
6. Rework reports into completed form.
7. Prepare blue-line (invisible to camera) form for typist to type on for layout of camera-ready copy.
8. Transmit editing comments to writers with explanations about needed changes.
9. Rearrange section of report prepared by writers; with scissors and paste if necessary.
10. Review, back at shop, all documents including interview form, to get overall picture of site.
11. Letter all documents in order to refer to them in an outline.
12. Organize all notes in order of prescribed format provided by sponsor's editor.
13. Prepare complete outline referenced to all lettered documents, notes, and questionnaire sections.
14. Call back to site to elicit any information that is missing when filling out complete outline or when writing each section using the annotated outline.
15. Write each section, using annotated outline.
16. Have others read for clarity, information, and completeness--refer it to one person who was on site, and one who wasn't on site.
17. Incorporate useful suggestions made by others in rewrite.
18. Submit completed write up for editing by project editor and sponsor's editorial staff.
19. Negotiate changes with project and sponsor's editors.
20. Incorporate changes as considered necessary by project and sponsor's editors.
21. Rewrite entire or part of the manuscript, as is necessary to correct obvious errors, incorporating answer to questions.
22. Have original author read it for fidelity to site, program content, etc.
23. Telephone site in order to set up visitation.
24. Interview, with questionnaire, project staff members about their reading program.
25. Write reports on reading projects for White House Conference.
26. Record site data from questionnaire and other sources.
27. Telephone persons at the reading program site.
28. Interview project staff members about reading program.
29. Write detailed notes about reading program and site.
30. Confer with partner on site about visit.
31. Convert notes into a rough draft report.
32. Read all available literature about site before going to site.
33. Do observations at site to gather data on site description, location, facilities.
34. Write notes on observations, to be used later by self or others.

35. Contact local chamber of commerce for information on the community, population types, size, facilities for room, board, and travel.
36. Interview staff member at site, using prepared interview schedule, and answering all questions as completely as possible.
37. Collect any useful papers which are available at the site, for use later in writing report on site.
38. Transmit format requirements for camera-ready copy to typists, with notes about spacing, type styles, placement of heading.
39. Do gross editing for omitted sections and deviance from style requirements.
40. Monitor work of typists for timeliness and compliance to criteria in preparation of camera-ready copy.
41. Check data with interviewing partner.
42. Go over report with an editor.
43. Read report on a site written by previous writer (often editors decide it must be rewritten) and all other documents on that site.
44. Make list of questions to be answered by previous author or by phone call to site.
45. Write follow-up letter confirming appointment.
46. Create chart to track progress and location of each long and short report for each site, showing completion of rough draft, editing, rewrite, sponsor's editing, and short report for each site, showing completion of rough draft, editing, rewrite, sponsor's editing, final draft, preparation of camera-ready, submission of final product to sponsor and dates of each step completion.
47. Maintain tracking chart by adding each new site selected, adding names to each step--show who's responsible, checking off each step as it is completed.
48. Transmit all new changes in format or content requirements to writers.
49. Negotiate with sponsor by phone, after they receive manuscript, about changes in style, content.
50. Interface between sponsor and writers: transmit and translate changes the sponsor feels are necessary; work with both until each is satisfied.
51. Negotiate with sponsor type styles for camera-ready copy.

Enablers of Production:

1. Knowledge of format and content requirements from sponsor.
2. Knowledge of printing technology and language to work with print shop in developing blue-line forms.
3. Knowledge of type faces, sizes, to be able to talk with sponsor to determine how to most economically meet their requirements.
4. Knowledge of overall timeliness of project in order to create a monitoring system for things produced on time.
5. Knowledge of terms used in psychology.
6. Knowledge of similar reports for the White House Conference.

7. Knowledge of nature of site (obtained from interviewing and other sources).
8. Knowledge of psychology and psychological terms through working with psychologists.
9. Knowledge of site's personnel, services, equipment, etc.
10. Understanding of basic purpose of interview form, so vital questions are not skipped or left partially answered.
11. Knowledge of educational materials, theories, and methods, to communicate with persons on site and to evaluate results.
12. Awareness of what is normal behavior of children and what treatments are current in education field in order to identify unusual features.
13. Organizing skills to arrange materials and monitoring systems for supervising flow of work.
14. Skill in supervisory skills to work with typists, to make sure they understand what is wanted and get it done on time.
15. Ability to write style requirements for writers to work from; clearly enough so they are sure what is wanted.
16. Ability in editing skill to be used to review prepared manuscripts.
17. Skill in emphasizing critical areas of information about site and reading program.
18. Ability in writing letters confirming appointments.
19. Skill in using questionnaire to obtain information.
20. Skill in listening to project personnel in order to gain information about site and reading program.
21. Skill in being "intuitive" about program and its operation.
22. Skill in writing reports with a journalistic style.
23. Skill in questioning and using a questionnaire for data collection.
24. Skill in preparing project personnel for upcoming interviews.
25. Skill in knowing how to use information about the site which is available to the project before visitation.
26. Skill in establishing rapport with interviewees.
27. Skill in interpreting technical terms (jargon).
28. Skill in using a tape recorder.
29. Skill in taking notes during an interview.
30. Skill in writing reports.
31. Skill in discussing notes taken by both interviewing partners.
32. Ability to reassure or relax people on the site so that they will not distort information through tension or defensiveness.
33. Take clear notes, that can be read by self and others working in whatever circumstances are available where interviewee works.
34. Select useful information, which would help others to understand program to be described, from irrelevant information.
35. Awareness of slight cues which can be followed to other possible information sources: casual reference to unheard of report, etc.
36. Ability to interview in various ways to meet the perceived needs of interviewees.
37. Ability to use interview forms: follow directions.
38. Skill in knowledge of use of observation techniques, including making self physically unobtrusive.
39. Skill in deciding what would be useful to others who are trying to do a similar project.

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40. Skill in general writing skills of clarity, interest, grammar, pacing, in order to keep report readable.
41. Sensitivity to fact that perceptions vary among people.
42. Sensitivity to interviewee's anxieties about evaluation data by project personnel.
43. Sensitivity to the possibility that the interviewer may make unwarranted assumptions.
44. Sensitivity to anxieties about costs and budget of project.
45. Skill in sensing when people are defensive or uncertain, needing help or information before they can be useful informants.
46. Perceptive about type of person being interviewed, to adapt interview style to that person's needs.
47. Sensitive to the tone of report, to keep tone desirable.
48. Sensitive to when information is essential for understanding of redundant, to keep report both complete and short.
49. Ability to sense when to deviate from form to elicit information that is felt to be present but not readily forthcoming.
50. Sensitivity to indicate feeling of enthusiasm about the project being described in order to support staff in their endeavor.
51. Sensitivity to interpersonal skills to use in working with writers when changes are necessary, so they can accept need for changes.
52. Sensitivity to negotiate inoffensively for elimination of inconsistencies in sponsor's requirements.

P-18: Brief Reports of Childhood Learning Programs (for White House Conference)
Level: Focal product
Status: In process

Although some of the project's staff performed the roles of writer and interviewer, it was found that certain persons could be used principally as writers and others mainly as interviewers. A person who had a good knowledge of editing and the processes necessary for the publication of the reports was made responsible for editing the reports of the project's staff and for negotiating matters of format, style, and technology with the sponsor's editors. The Project Director delegated almost all the tasks and responsibilities regarding the all-important matter of publishing reports to this editor, intervening only when problems of politics arose.

Product Standards:

1. Product complies with all stated format specifications.
2. "Looks good" to editor, satisfies esthetic, self-established criteria.
3. Product is accepted by sponsor's project monitors.

Production Tasks:

1. Read proposal and discuss with sponsor to determine component list and style criteria for final brochure.
2. Blend the above with writing style to provide a consistent guide to writers.
3. Determine, through discussion with sponsor, the criteria for physical appearance of camera-ready copy.
4. Prepare blue-line (invisible to camera) form to guide typists for layout of camera-ready copy.
5. Transmit editing comments to writers and explain so they can make needed changes.
6. Prepare model and cue sheet (1st word of each line) for typist to use.
7. Develop cue word method for typists to use to minimize supervision of typing of camera-ready copy.
8. Do gross editing for omitted sections and deviance from absolute style requirements, overall length.
9. Monitor for timeliness, compliance to criteria, rewriting, and preparation of camera-ready copy.
10. Transmit style and content requirements to writers.
11. Negotiate with sponsor's office by phone, after they receive copy of manuscript draft, about changes in style, content.
12. Interface between sponsor's editors and project writers--transmit and translate sponsor's comments and recommendations for change until satisfactory to both parties.

Enablers of Production:

1. Knowledge of purposes for and use of style books, to prepare one which is a blend of sponsor's requirements and commercial standards for writers to use.
2. Knowledge of printing technology and type styles, to be aware of what is possible and to transmit requests to printers.
3. Skill in detecting inconsistencies in style, logic, and data.
4. Skill in editing (checking for compliance with style and length criteria), to do first gross editing of manuscript.
5. Ability in interpersonal skills in transmitting editorial changes from self or sponsor to writers, to prevent defensive behavior and to get job done right.
6. Skill in technical knowledge of style and format criteria to use when negotiating with sponsor's editor.
7. Skill in mathematics to be used to divide lines by pages available, to fit format requirements.
8. Skill in organization, to be used to develop and maintain processes for monitoring the progress of many products at the same time.
9. Sensitivity to negotiate resolutions of inconsistencies with sponsor by being aware of minimal cues regarding where they will give in and where they won't, to require as little change in the manuscript as is possible.

10. Tact in telling writers why a format requirement must be met, to assure their cooperation and compliance.
11. Visual sense to see when spacing looks good, to prepare an esthetically acceptable product.

P-04: List of Scheduled Sites
Level: Subproduct
Status: Completed

Product Standards:

1. "The longer the conversation, the more information, the better." (Refer to Task #3)
2. "If I got the information I set out to get, I felt it was a good call." (Refer to Task #3)
3. "The emotional tone of the contact person."
4. Site visitation deadlines are met at a rate which permits completion of contractual commitments.

Production Tasks:

1. Review data about sites having exemplary reading programs.
2. Make card file of potential sites for visiting.
3. Telephone persons at potential sites to determine status of reading program projects.
4. Schedule and assign initial site contact responsibilities.
5. Call a site evaluator for preliminary site information.
6. Explain purposes of project to site, to elicit site cooperation.
7. Organize recommendations with details and arrange input to Project Director regarding potential sites.
8. Obtain suggestions for exemplary sites from project and agency staff members.
9. Inform Project Director of need for decisions on sites to be selected.

Enablers of Production:

1. Knowledge of own staff personalities and competencies for selecting those to make initial site contacts.
2. General understanding of the characteristics of sites potentially available.
3. Knowledge of geographical areas for which sites are being sought.

4. Knowledge of the purposes of the project as necessary to explain to those being asked to participate.
5. Knowledge of various reading programs currently used throughout the country.
6. Knowledge of field-site characteristics.
7. Knowledge of how card files are organized from previous contractor experiences.
8. Skill in identifying and contacting people knowledgeable of reading program at particular site.
9. Skill in employing techniques to permit a person to think he was controlling a conversation.
10. Skill in taking useful notes pertaining to sites having exemplary reading projects.
11. Skill in making up a card file of sites of exemplary reading programs.
12. Sensitivity to what information is needed about the reading program and its personnel, structure, and funding.
13. Sensitivity to willingness to persevere in seeking site selection decisions from Project Director.
14. Sensitivity to avoiding any commitment to site on initial contact in the absence of confirmed selection.

P-13:	Team Training Procedures
Level:	Subproduct
Status:	Completed

An important historical note about the project should be made here. The temporary Project Coordinator was replaced by the permanent Project Coordinator after the project had been underway about three months. The first coordinator was borrowed from another contractor program, but was still available at time of the site visitation. Therefore, the bringing together of individuals to comprise the interviewing team was the responsibility of a person who was well qualified to perform the attendant tasks, but who was not officially listed on the project roster as an administrator of this rank.

Two personality characteristics seem to be very important in developing the training procedures and organizing interviewing teams, namely, tact and organizational skill. A goodly amount of sensitivity to the feelings and wishes of others seems to be an essential ingredient in the personality of the person who is responsible for organizing the interviewing teams, and it would seem that such a person should also possess natural skills in organizing people and information.

Product Standards:

1. "I felt good about my judgments."
2. "People indicated they did (or didn't) like traveling."

Production Tasks:

1. Identify potential team members from among agency staff.
2. Arrange for interview teams to visit sites of exemplary reading programs.
3. Arrange meetings for project staff and interviewers to review questionnaire to be used in study.

Enablers of Production:

1. Knowledge of preferences, abilities, and compatibilities of potential project personnel.
2. Knowledge of pertinent information about site funding, type of reading program, location, etc.
3. Knowledge of writing abilities of interviewers.
4. Knowledge of abilities of persons who might contribute to the objectives of the meetings.
5. Skill in being able to talk informally and frankly with potential team members.
6. Skill in organizing a system for selecting sites, using a card file.
7. Skill in utilizing a card file to give information to teams.
8. Skill in talking with teams about alternate sites, presenting information about sites to teams.
9. Skill in conducting meetings with agency staff personnel.
10. Sensitivity to the personal preference of staff members about the type of assignment they would accept.
11. Sensitivity to the realization that interviewers would like to be consulted regarding traveling and sites.

P-11: Prepared Interview Questions
Level: Subproduct
Status: Completed

The basic questionnaire used in the Exemplary Reading Programs Project was used before by the contracting agency in a similar project. The questionnaire was modified by a group of persons who had experience and expertise in devising questionnaires of this type, and it was further modified as a result of trying it out in the field.

Product Standards:

No information collected under this heading.

Production Tasks:

1. Review of available agency questionnaires suitable for interrogating persons engaged in reading program projects.
2. Organize procedures for developing a questionnaire.
3. Make the tentative questionnaire available for review by project staff.
4. Review questionnaire through debriefing teams and agency staff members.

Enablers of Production:

1. Knowledge of agency questionnaires for other projects.
2. Skill in developing procedures for developing questionnaires.
3. Skill in bringing appropriate people together for reviewing questionnaires.
4. Skill in conducting productive meetings.

Summaries of Product Data

The standards cited for the adequacy of the subproducts and focal products of the project are given in Table 4, and grouped into an arbitrary set of 23 product standards categories. It would be anticipated that effective communication would be an important type of standard for a project whose focal products were reports. Communication and Clarity was in fact the category containing the most frequent mention of standards by the interviewees. Two other categories, Acceptance by Sponsor and Goal Attainment point out that staff members were required to observe the standards of the sponsor in reporting their findings.

As might be expected, the tasks which were identified by the interviewees as being associated with their jobs centered mostly around the generation of products and the handling of data. The great majority of tasks which were discussed during the interviews had to do with gathering data for the reports which were to be delivered to the sponsor. Table 5 shows the frequency of task citation in each of seven arbitrary functional categories of tasks, into which each task statement had been coded by the interview methodology. Inasmuch as all of the staff members of the project were not interviewed, these data are incomplete and cannot be considered to be more than a sample of the complete set of task frequencies of the project.

TABLE 4

Frequencies of Citation of Product Standards
in Each Production Standards Category

Categories of Product Standards	Frequency of Citation
Completeness of content	2
Quantity of outputs/data	1
Quantity of effort expended	0
Communication and clarity	4
Utility or value of product	1
Acceptance by users	0
Personal satisfaction/feeling	1
Agreement concurrence with others	3
Lack of errors/discrepancies	1
Obvious (direct) termination	0
Appropriate design/content	0
Goal attainment	3
Acceptance by others (in proj)	1
Compliance with sponsor guidelines	2
Acceptance by sponsor	3
Compares favorably	0
Internally consistent	0
Satisfactory appearance	0
Logical criteria	0
Performs consistently	0
Sources of variance controlled	0
Functions as planned	0
Successfully constrains/guides	0
Total Number of Product Standards Cited	22

TABLE 5

Frequencies of Citation of Production Tasks in Each Production Tasks Category

Categories of Production Tasks	Frequency of Citation
Clarifying problem addressed	8
Formulating objectives	2
Designing the output	1
Producing the output	19
Collecting/processing data	28
Assessing the output quality	9
Diffusing the output	0
Total Number of Production Tasks Cited	67

Tables 6, 7, and 8 summarize the frequencies with which the interviewees designated the specific knowledges, skills, and sensitivities that enabled them to produce the subproducts and focal products of the Exemplary Reading Programs Project. The interviewees apparently relied considerably upon their knowledge of sites of reading program and childhood learning program projects and the contents of the programs themselves. Additionally, they needed to know a good deal about the operational details of their own project, especially with regard to scheduling, organizing, and staffing.

Writing skills were most frequently mentioned by the interviewees as being important in their carrying out tasks for the project. The second-most frequently mentioned skill category involved the use of data-gathering instruments (see Table 12). These findings are hardly surprising in light of the project's goals of assessing programs dealing with reading and childhood learning. Skill in the administration of data-gathering instruments would seem to be a prime requirement for any staff member who would be sent into the field.

The type of sensitivity most often mentioned in the interviews was an awareness of existing value systems which interact (political, religious, profit, etc.). Surprisingly enough, the interviewees did not often cite sensitivities about self and others, even though they obviously had to concern themselves with the feelings of others in the field and also at home. It is possible that our interviews did not probe as deeply into the sensitivities necessary for successful completion of tasks as they did into the skills and knowledges which were required.

Interactions of Product Data

. Table 9 shows the number of times that categories of standards were associated with products when those products are differentiated by their research, development, diffusion, or evaluation focus. The only products which were identified as being associated with standards were those classified as development and diffusion.

Table 10 reveals that most of the tasks discussed by the interviewees were associated with diffusion products and had to do with obtaining and processing the data and producing the subproducts and focal products of the project.

The data in Tables 11, 12, and 13 reveal that most of the knowledges associated with generating products were associated with development and diffusion. More skills are associated with products having a research focus than are sensitivities and knowledges, but the majority of skills are associated with development and diffusion. The sensitivities identified by the interviewees are associated only with products having a development or diffusion focus.

TABLE 6

Frequencies of Citation of Knowledges
in Each Knowledges Category

Categories of Knowledges	Frequency of Citation
Standard school subjects	0
Subjects learned in courses	0
Subjects related to RDD and/or E	3
Technical/professional topics	2
Project focus topics, external	4
Project variables: external	17
Project operation: general	5
Project operation: specific	3
Scheduling and organizing	1
Staff status/responsibilities	0
Fiscal matters	3
Resources: personnel	1
Resources: money	1
Resources: time	0
Resources: equipment	0
Guidelines for reporting	1
Writing styles	0
Staff competencies/interests	0
Technical terminology/language	0
Sponsor concerns	0
Management techniques	0
Total Number of Knowledges Cited	41

TABLE 7

Frequencies of Citation of Skills in Each Skills Category

Categories of Skills	Frequency of Citation
Teaching	0
Facilitating people interactions	1
Translating content to media	0
Using/applying feedback	0
Programming project events	2
Programming subject matter	1
Programming technical equipment	0
Analytical reading/study	0
Analytical problem solving	1
Analytical data handling	0
Disciplining self	0
Disciplining others	0
Listening	0
Writing	8
Presenting orally	3
Using media	1
Interpreting language	1
Finding fits/integrating	6
Planning/conceptualizing	3
Exercising judgment	1
Tracking activities/goals	0
Estimating expenses/resources	2
Persuading/justifying	4
Explicating goals/procedures	1
Applying measurement tools	1
Locating/maintaining information	1
Using equipment/systems	0
Running task oriented meetings	0
Getting others to perform	0
Adapting to situation/demands	0
Taking another's perspective	0
Total Number of Skills Cited	37

TABLE 8

Frequencies of Citation of Sensitivities in Each Sensitivities Category

Categories of Sensitivities	Frequency of Citation
Values of self and others	3
Capabilities and limitations	9
Needs of self and others	2
Interactions of self and others	2
Context of subject matter	0
Worth in disciplines/methods	0
Context of objectives	1
Worth in objectives	0
Awareness of alternatives	4
Awareness of structure	6
Awareness of method	1
Role of catalyst/synthesizer	0
Language barriers	2
Reality in goal setting	2
Degrees of freedom to deviate	2
Existing value systems	4
Personality of others	1
Potential conflict of interest	3
Supportiveness required	0
Unstated obligations	1
Limitations of analyses/data	1
Responses of target audiences	2
Cost/benefit factors	0
Sources of error	0
Individual differences	0
Recognition of data needs	0
Acceptability of output	0
Admitting error/adapting	0
Willingness to experiment	0
Total Number of Sensitivities Cited	46

TABLE 9

Relation of Production Standards to Product Categories

Categories of Standards	Product Focus			
	Research	Development	Diffusion	Evaluation
Completeness of content	0	1	1	0
Quantity of outputs/data	0	1	0	0
Quantity of effort expended	0	0	0	0
Communication and clarity	0	0	4	0
Utility or value	0	1	0	0
Acceptance by users	0	0	0	0
Personal satisfaction/feeling	0	1	0	0
Agreement concurrence with others	0	1	2	0
Lack of errors/discrepancies	0	1	0	0
Obvious (direct) termination	0	0	0	0
Appropriate design/content	0	0	0	0
Goal attainment	0	1	2	0
Acceptance by others (in proj)	0	1	0	0
Acceptance by sponsor	0	0	3	0
Compliance with sponsor guidelines	0	2	0	0
Compares favorably	0	0	0	0
Internally consistent	0	0	0	0
Satisfactory appearance	0	0	0	0
Logical criteria	0	0	0	0
Performs consistently	0	0	0	0
Sources of variance controlled	0	0	0	0
Functions as planned	0	0	0	0
Successfully constrains/guides	0	0	0	0
Total Standards per Product Focus	0	10	12	0

TABLE 10

Relation of Production Tasks
to Product Categories

Categories of Production Tasks	Product Focus			
	Research	Development	Diffusion	Evaluation
Clarifying problem addressed	1	2	5	0
Formulating objectives	0	0	2	0
Designing the output	1	0	0	0
Producing the output	0	1	18	0
Collecting/processing data	0	0	28	0
Assessing the output quality	0	2	7	0
Diffusing the output	0	0	0	0
Total Tasks Per Product Focus	2	5	60	0

TABLE 11

Relation of Knowledges to Product Categories

Knowledges	Product Focus			
	Research	Development	Diffusion	Evaluation
Standard school subjects	0	1	0	0
Subjects learned in courses	0	0	2	0
Subjects related to RDD and/or E	0	2	3	0
Technical/professional topics	0	0	4	0
Project focus topics, external	1	1	2	0
Project variables: external	0	6	3	0
Project operation: general	0	2	3	0
Project operation: specific	0	1	3	0
Scheduling and organizing	0	4	0	1
Staff status/responsibilities	0	5	0	0
Fiscal matters	0	0	0	2
Resources: personnel	0	5	0	0
Resources: money	0	0	0	0
Resources: time	0	0	0	0
Resources: equipment	0	0	0	0
Guidelines for reporting	0	0	1	0
Writing styles	0	0	0	0
Staff competencies/interest	0	2	0	0
Technical terminology/language	0	0	2	0
Sponsor concerns	0	1	0	0
Management techniques	0	0	0	0
Total Knowledges per Product Focus	1	30	23	3

TABLE 12

Relation of Skills to Product Categories

Skills	Product Focus Research	 Development	 Diffusion	 Evaluation
Teaching	0	2	2	0
Facilitating people interactions	3	4	4	0
Translating content to media	0	0	0	0
Using/applying feedback	0	3	3	0
Programming project/events	2	1	1	0
Programming subject matter	0	0	0	0
Programming technical equipment	0	0	0	0
Analytical reading/study	0	0	0	0
Analytical problem solving	1	0	0	0
Analytical data handling	2	5	5	0
Disciplining self	1	2	2	0
Disciplining others	0	0	0	0
Listening	0	3	3	0
Writing	1	9	9	0
Presenting orally	2	2	2	0
Using media	0	9	0	0
Interpreting language	0	2	2	0
Finding fits/integrating	0	2	2	0
Planning/conceptualizing	0	0	0	0
Exercising judgment	1	2	2	0
Tracking activities/goals	2	0	0	0
Estimating expenses/resources	0	0	0	0
Persuading/justifying	1	0	0	0
Explicating goals/procedures	0	0	0	0
Applying measurement tools	0	8	8	0
Locating/maintaining information	1	0	0	0
Using equipment/systems	1	3	3	0
Running task oriented meetings	1	0	0	0
Getting others to perform	0	0	0	0
Adaptating to situation/demands	0	2	2	0
Taking another's perspective	0	0	0	0
Total Skills per Product Focus	19	59	50	0

TABLE 13

Relation of Sensitivities to Product Categories

Sensitivities	Product Focus Research	 Development	 Diffusion	 Evaluation
Values of self and others	0	1	0	0
Capabilities and limitations	0	0	0	0
Needs of self and others	0	3	0	0
Interactions of self and others	0	0	0	0
Context of subject matter	0	1	3	0
Worth in disciplines/methods	0	0	0	0
Context of objectives	0	0	0	0
Worth in objectives	0	0	0	0
Awareness of alternatives	0	0	0	1
Awareness of structure	0	0	1	0
Awareness of method	0	0	0	0
Role of catalyst/synthesizer	0	1	0	0
Language barriers	0	1	0	0
Reality in goal setting	0	0	0	0
Degrees of freedom to deviate	0	0	2	0
Existing value systems	0	4	2	0
Personality of others	0	0	2	0
Potential conflicts of interest	0	1	0	0
Supportiveness required	0	9	0	0
Unstated obligations	0	1	0	0
Limitations of analyses/data	0	1	0	0
Responses of target audiences	0	1	4	0
Cost/benefit factors	0	0	2	0
Sources of error	0	0	2	0
Individual differences	0	1	2	0
Recognition of data needs	0	2	0	0
Acceptability of output	0	0	2	0
Admitting error/adapting	0	0	0	0
Willingness to experiment	0	0	0	0
Total Sensitivities per Product Focus	0	27	22	1

Chapter IV: Details on Each Management Responsibility

This chapter deals with responsibilities which the interviewing team linked to the management of the project. The two types of management responsibility to be discussed are management of production and management of environment. Production management responsibilities have to do with insuring that the various products necessary to the success of the project are developed according to standards set for them and done so within the timelines and resources available. Environmental management responsibilities are concerned with insuring that the environments within which the project functions are such that they enhance the development and well being of the project personnel and the parent institution or agency.

Production Management Responsibilities

Listing of standards, tasks, and enablers. To a considerable extent, the philosophy of the Project Director pervades the atmosphere in which the project is conducted. His policy of delegating authority and responsibility and of creating an informal network of communications is evident in the tasks the project personnel carry out.

PM-30: Quality Products

Product Standards:

1. Fewer sponsor editorial comments as site descriptions are cycled for approval.
2. Data obtained by the interviewer can be used by the writer with a minimum of face-to-face interaction.
3. Agreement is reached on given quality issues among people with professional expertise.

Production Management Tasks:

1. Obtain personnel having known competencies required by project.
2. Read drafts of site descriptions for clarity of communication, comprehensiveness.
3. Examine interview instruments for consistency of data being elicited by interviewers.
4. Examine completed interview instruments for clarity of data entered by interviewers.
5. Identify quality control issues.

6. Determine need for agency or consultant level guidance in resolving issues or defining alternatives.
7. Select and convene advisory group to assist in resolution of quality control issues.

Enablers of Production Management:

1. Knowledge of levels of reliability and validity possible in collecting various classes of hard and soft data.
2. Knowledge of measurement issues involved with descriptive measures.
3. Knowledge of the sponsor's monitoring concerns.
4. Sensitivity to instances of jargon-type language in questionnaires.
5. Sensitivity to the uncontrolled variables inherent in the site-observation system employed.
6. Sensitivity regarding project issues on which it is appropriate to "stand alone."

PM-31: Work Assignments

Product Standards:

1. Site description manuscripts contain no discrepancies or contradictions.
2. Assignments considered appropriate when little rewrite was necessary.
3. Individuals on staff were cooperative in responding to requests different from interests.
4. Individuals on staff are willing to work with any other staff member.

Production Management Tasks:

1. Determine which staff members are capable of good site description writing.
2. Specify tasks yet to be done to complete project commitments.
3. Adjust task assignments temporarily to take maximum advantage of traveling personnel while they are in the office.
4. Determine status of work accomplished and work yet to be started.
5. Determine status of current work in terms of revisions or refinement necessary to complete.

6. Determine individual staff member's preference in choice of sites to observe or write up.
7. Schedule a naive staff interviewer with one experienced interviewer.
8. Consider those with specialized skills within the area of reading.
9. Consider demands on staff in terms of time away, number of sites visited while away.
10. Assign personnel to site visits and writing tasks.

Enablers of Production Management:

1. Knowledge of units of work required to review and edit manuscripts for professional quality.
2. Knowledge of good grammar and sentence structure.
3. Knowledge of general writing skills of project personnel.
4. Knowledge of current status of site descriptions and the inputs required for their completion.
5. Knowledge of impending completion dates for various events and documents.
6. Knowledge of conditions which make it inconvenient or inadvisable for certain people to be away.
7. Knowledge of where staff members might prefer to go for site visitations.
8. Knowledge of the general characteristics of each site to be visited.
9. Sensitivity as to which people are required to provide inputs to tasks awaiting completion.
10. Sensitivity to length of time personnel are on the road and/or in the field.

PM-26: Refined Product Report Specifications

Product Standards:

1. Contact with sites selected proves them to be operational.
2. Site list meets criteria set forth and is representative of all classes of sites deemed important.
3. Agreement between funding sponsor and project regarding content and format of site descriptions.

Production Management Tasks:

1. Interact with sponsor regarding reporting format and content.
2. Delegate responsibility for interacting with sponsor officers regarding critiques of reports as sponsor officers did likewise.

3. Generate proposed site list coming from project and agency personnel.
4. Determine adequacy of sponsor-furnished site list in terms of representativeness, current operational status, etc.
5. Refine site-selection criteria to include adequate cross-section of country and sampling of no-to-low cost programs.

Enablers of Production Management:

1. Knowledge of all site characteristics which are to be observed.
2. Knowledge of the basic criteria set for site selection.
3. Skill in presenting the project's view of a site reality in order to balance report content against "political" editing.
4. Sensitivity to staff perceptions of the realities existing in the observed sites to negotiate report content.
5. Sensitivity to policies and philosophies of the funding sources of the sites selected for description.
6. Sensitivity to "political" editing of site descriptions in order to determine the merit of the editing.

PM-27: Compatible Work and Expenditure Rates

Product Standards:

1. Projected cost of work remaining balances satisfactorily with funds remaining.

Production Management Tasks:

1. Examine work progress charts for status and indications of movement over time.
2. Read random selections of drafts of site descriptions for adherence to format, content, and completeness of content.
3. Confer with Project Coordinator relative to needs in maintaining timeline performances.
4. Informally communicate with writers and interviewers regarding work read.
5. Review with project Administrative Assistant the status of expended and encumbered funds.

Enablers of Production Management:

1. Knowledge of funds expended and encumbered.

2. Knowledge of relative rate of expenditure.
3. Knowledge of work done relative to work yet to be accomplished.

PM-29: Compatible Time-people Relationships

Product Standards:

1. Products completed on or before due dates set.
2. Production progresses within budgeted resource base.

Production Management Tasks:

1. Enlarge staff to speed production at critical or peak load points in time.
2. Extend time, as available, for completion of tasks when pressures dictate.
3. Identify tasks which need supporting with additional personnel.
4. Identify available competencies within agency which can support project tasks during peak loads.
5. Monitor progress or work overtime.

Enablers of Production Management:

1. Knowledge of work loads carried by individual staff members.
2. Knowledge of what skills are possessed by individual staff members.
3. Knowledge of interviewee population, i.e., sex, grade level, local political/social issues.
4. Knowledge of capability of individual staff members to elicit interview information being sought.
5. Skill in programming work to be accomplished compatible with staff competencies.
6. Skill in systematically varying the composition of interview teams to provide for reliability and validity within time/people framework.
7. Sensitivity to public school attitude toward strangers in understanding time required to produce rapport.
8. Sensitivity to different skills being required to interview different levels or types of public school people.
9. Sensitivity to the tendency of public school interviewees to engage in time-wasting gossip.

PM-32: Efficient Manuscript Processing

Product Standards:

1. Documents accepted by sponsor in terms of format and content specifications.
2. Minimal use of manpower pool support during peak periods when slack times occur elsewhere.
3. Deadlines have been met.
4. Project personnel have been cooperative in temporarily shifting work to maximize operational efficiency.

Production Management Tasks:

1. Share in proofreading manuscripts for clarity, readability, typographical errors, grammar, etc.
2. Expedite written manuscript drafts to typists and return to writer.
3. Obtain extra typists as required to meet deadlines.
4. Keep track of work being prepared for typing.
5. Adjust professional staff activities to take best advantage of anticipated extra typist support.
6. Determine need for copy editing of each manuscript through initial inspection of draft.
7. Examine edited drafts returned from sponsor to determine extent of revision required.
8. Answer technical questions raised by staff relative to production of manuscripts.
9. Participate in negotiating suggested manuscript changes with sponsor personnel.
10. Process manuscript draft for copying and send to sponsor.

Enablers of Production Management:

1. Know what people are currently doing and producing.
2. Skill in keeping a lot of different status conditions in mind at the same time.
3. Skill in making decisions when they have to be made.
4. Skill in coordinating the differing ideas staff members have about what they should be doing and when.
5. Skill in passing on understanding of the need for doing things in sequence.

Environmental Management Responsibilities

Listing of standards, tasks, and enablers.

EM-25: Staff Awareness

Product Standards:

No information collected under this heading.

Production Management Tasks:

1. Explain time lines in terms of overall project commitments and real-time constraints.
2. Describe the characteristics of the products to be produced.
3. Describe overall procedures and strategies for collecting and validating data and producing the reports.
4. Describe the character of the project in terms of the nature of its activities and probable utility.

Enablers of Production Management:

1. Knowledge of project intents.
2. Skill in visualizing and projecting broad behaviors necessary to successfully achieving intended ends.
3. Sensitivity to the inhibiting and facilitating effects of operational structures.

EM-29: Comfortable Decision-making Structure

Product Standards:

1. Decisions get made by others which do not compromise project objectives.
2. Work progresses without staff frequently waiting for decisions.
3. Decisions get made by staff at relevant points in time.
4. Staff reflects willingness to act on and make decisions.

Environmental Management Tasks:

1. Review decisions made for compatibility with project objectives or intents.
2. Reassign decision-making responsibilities to higher levels when decisions made are out of line.
3. Support staff in appropriate decisions made to reinforce their willingness to make decisions.
4. Participate in clarifying issues around which decisions are to be made.
5. Define procedures for periodic review of decisions made in order to maintain project integrity.
6. Set deadlines by which staff decisions must be made.
7. Make decisions appropriate for Director's level of responsibility.
8. Make decisions for subordinates when staff fails to meet decision deadlines.
9. Define levels of responsibility for making decisions.
10. Delegate responsibility for specialized decision making to appropriate specialists.
11. Specify conditions under which decisions must be referred for review or approval.

Enablers of Environmental Management:

1. Knowledge of specialities and competencies among staff.
2. Skill in keeping abreast of the progress of work and the operations relating to it.
3. Ability to determine which decisions should be made by specialists or require other professional expertise.
4. Ability to allow staff to make decisions commensurate with areas of professional expertise.
5. Sensivitity to the decision-making implications of the project objectives.
6. Sensitivity to the needs of staff for some kind of reward system.
7. Willingness to abide by consensus decisions compatible with the project.

Summaries of Environmental Management Data

The interviewees pointed most often to signs that personnel had perceived problems and had taken appropriate action when they were asked about the standards applied to management outcomes. This finding reflects the philosophy of the Project Director that his staff members should be allowed to take the initiative in solving their problems. Another category that was cited fairly often had to do with personnel cooperation in carrying out their responsibilities and tasks. (See Table 14)

TABLE 14

Frequencies of Citation of Standards for Production Management Outcomes in Each Standards for Production Management Outcomes Category

Categories of Standards for Production Management Outcomes	Frequency of Citation
Personnel cooperate	3
Personnel are satisfied	0
Minimum correction required	2
Deadlines are met	3
Acceptable level of output	0
Work structure is efficient	1
An expected activity occurs	0
Staff contributions accepted	0
Outside contributions accepted	0
Maximum possible participation	0
Costs consistent with estimates	1
No obvious omissions	0
Work conducted within budget	1
No felt deficiencies	0
Tasks perceived and acted upon	4
External cooperation gained	1
External enthusiasm evident	0
Desired personnel obtained	0
Adequate reputation with sponsor	0
Performance respected	0
Feedback occurs	0
Project view accepted	0
Costs acceptable for benefits	0
Total Number of Standards of Production Management Outcomes Cited	16

Table 15 lists the management tasks identified as being associated with persons involved in management of the project. Quality control, accountability, and procurement of the necessary support systems are highlighted, with mechanisms involving information flow and decision making receiving attention.

Table 16 summarizes the relationship between standards for production management and product categories. Table 17 relates production management tasks to product categories.

TABLE 15

Frequencies of Citation of Production Management Tasks in Each Production Management Tasks Category

Categories of Production Management Tasks	Frequency of Citation
Procuring professional staff	8
Effecting accountability	15
Procuring systems/services	11
Effecting quality control	19
Maintaining job satisfaction	3
Facilitating growth of staff	2
Enhancing physical environment	1
Maintaining equity among staff	1
Facilitating relationships	1
Effecting information flow patterns	5
Diffusing information within project	5
Diffusing information beyond project	0
Effecting decision mechanisms	6
Total Number of Product Management Tasks Cited	77

TABLE 16

Relation of Standards for Production Management Outcomes to Product Categories

Categories of Standards for Production Management Outcomes	Product Focus Research	 Development	 Diffusion	 Evaluation
Personnel cooperate	0	3	0	0
Personnel are satisfied	0	0	0	0
Minimum correction required	0	2	0	0
Deadlines are met	0	3	0	0
Acceptable level of output	0	0	0	0
Work structure is efficient	0	1	0	0
An expected activity occurs	0	0	0	0
Staff contributions accepted	0	0	0	0
Outside contributions accepted	0	0	0	0
Maximum possible participation	0	0	0	0
Costs consistent with estimates	0	0	0	1
No obvious omissions	0	0	0	0
Work conducted within budget	0	1	0	0
No felt deficiencies	0	0	0	0
Tasks perceived and acted upon	0	4	0	0
External cooperation gained	0	1	0	0
External enthusiasm evident	0	0	0	0
Desired personnel obtained	0	0	0	0
Adequate reputation with sponsor	0	0	0	0
Performance respected	0	0	0	0
Follow-on proposals are funded	0	0	0	0
Feedback occurs	0	0	0	0
Project view accepted	0	0	0	0
Costs acceptable for benefits	0	0	0	0
Total Number of Standards for Production Management Outcomes Cited	0	15	0	1

TABLE 17

Relation of Production Management Tasks to Product Categories[a]

Categories of Production Management Tasks	Product Focus			
	Research	Development	Diffusion	Evaluation
Procuring professional staff	0	8	0	0
Effecting accountability structure	0	9	4	2
Procuring systems/services	0	5	6	0
Effecting quality control[a]	0	14	4	0
Maintaining job satisfaction	0	3	0	0
Facilitating growth of staff	0	2	0	0
Enhancing physical environment	0	1	0	0
Maintaining equity among staff	0	1	0	0
Facilitating relationships	0	1	0	0
Effecting information flow patterns	1	2	2	0
Diffusion information within project[a]	1	2	0	0
Diffusing information beyond project	0	0	0	0
Effecting decision mechanisms	0	6	0	0
Total Tasks Per Product	2	54	16	2

[a] This table does not include three of the products from which Table 15 was derived.

Chapter V: Supplementary Data

Included in this chapter are data about the frequencies of the project's tangible products within research, development, diffusion, and evaluation classifications, and the backgrounds of project and agency personnel, including their job activities.

Classification of the Products

Of the 24 tangible products identified by the interviewers, 10 were classified as "development," six were classified as "diffusion," and eight were classified as "evaluation" (see Table 18). Of these tangible products, all but numbers 19 through 24 were completed at the time of our visit. Generally speaking, as the project evolved the products being generated changed from evaluative to developmental. Those yet to be produced will be largely considered diffusion products.

TABLE 18

Frequency of Products by Focus

	Frequency of Products		
Product Focus	Completed	Not Completed	Total
Research	0	0	0
Development	9	1	10
Diffusion	2	4	6
Evaluation	7	1	8

Interrelationships Among Products

The exemplary reading reports were the focal products of the original proposal to USOE. The White House Conference reports temporarily halted all work on the exemplary reading programs phase of the project. During the site visitation period the last of the White House Conference reports was being submitted to USOE and work on the reading programs was continuing.

Most of the other products are ancillary in nature; aiding in the production of the four focal products. Also, 12 audio-visual presentations illustrating selected White House Conference reports were being completed.

Summary of Staff Background

The Palo Alto branch of AIR, being located near several major universities, is able to employ individuals who are engaged in or who have completed their preparation for academic degrees. The number of professional staff (i.e., researchers, program directors, statisticians, etc.) employed at the time of interview was 70. The clerical support staff (i.e., secretaries, clerks, stenographers, etc.) numbered 14, and the technical support staff (i.e., librarians, graphic artists, photographers, media specialists, etc.) totaled four. The proportion of academic degrees held by the agency's professional personnel were reported as follows:

doctorate - 29%

master's - 26%

bachelor's - 21%

nondegree - 24%

Some of the persons who were working on this project--all but the Director being women--were providing financial support for their husbands who were working toward advanced degrees. Others might be regarded as having "found" their careers in educational research, development, diffusion, and evaluation. The academic degree held by the individual, however, cannot be used as an index of whether a person was engaged in employment which might be termed "permanent." Two of the five persons from whom data were collected held master's degrees, and three held bachelor's degrees. There seemed to be no correlation between the degree held and the rank of the person who held it.

In keeping with their varied academic backgrounds, the interviewers reported different kinds of work experiences. Table 19 reveals that the collective experiences in research, development, diffusion, and evaluation were probably good preparation for their present roles. Three had been engaged in R,D,D, and/or E work for one to four years, and one individual had been engaged in that general type of work for five years or more. Although there is now no way to knowing how typical these data are for persons engaged in projects of a similar nature, none of the interviewees directly prepared himself for a career in educational research, development, diffusion, and/or evaluation.

Citation of Prepared Individual Job Descriptions

The following lists of major work units were obtained in accordance with the rationale that the activities chosen by project personnel are selected to provide avenues toward the solutions of problems which arise in the generation of products.

TABLE 19

Summary of Interviewee Work Experience Backgrounds

Work Setting	Number of Interviewees in Each Year Category			
	No Experience	Less than one year	1 - 4 years	5 or more years
In R,D,D, or E Work	0	1	3	1
In Administrative Work	3	0	1	1
In College Teaching or Research	5	0	0	0
In Public Schools	2	0	3	0
In State or National Education Agencies	4	0	1	0
In R & D Centers	3	0	1	1
In Present Organization (may be concurrent with other areas above)	0	1	4	0
In Other Work Settings	3	0	0	2

Project Director.

Inform staff of broad project objectives.
Delegate specialized decisions to specialists.
Provide comfortable decision-making environment for staff.
Negotiate reporting format and content with sponsor.
Generate site list.
Monitor work progress in relation to expenditures.
Monitor work progress relative to quality.
Maintain sufficient time-people relationships.
Convene and conduct advisory committee and/or consultants.

Project Coordinator (temporary).

Gather and review information about prospective sites.
Select teams of interviewers.
Train interviewers.
Develop questionnaires to be used in gaining information about sites.
Visit sites of reading program projects for White House Conference.
Write reports for White House Conference.
Visit sites of reading program projects.
Write reports of reading program projects.
Revise completed reports.

Project Coordinator.

Determine status of site reports.
Firm up list of sites for White House Conference.
Assign writing tasks.
Schedule personnel for interviewing, writing, and editing.
Manage report processing for White House Conference.
Manage report processing of regular reading program projects.
Manage typing time.

Administrative Assistant.

Produce written report on exemplary reading program sites
Interview personnel at reading program sites.
Interview personnel at reading program sites for White House Conference report.
Edit reports of reading program visitations.
Write reports of reading program for White House Conference.
Write leaflet about reading program for White House Conference.
Review materials obtained at sites.
Collect data at sites.
Write reports of exemplary reading programs.

Editor.

Set up format for manuscripts for reports to sponsor.
Put brief reports into proper format.
Set up and control format of each long report.
Put long reports into proper layout format after all editing is done.
Monitor progress on site reports.
Edit booklets and leaflets.
Compose leaflets.

Interviewer.

Visit sites of reading programs.
Write reports of exemplary reading program projects.
Visit sites of reading programs for White House Conference report.
Write reports of reading programs for White House Conference.

These were the major work units which the interviewees discussed. Had the interview team interviewed more of the project's staff, obviously the list would have been even more comprehensive.

Classifications of Output Characteristics

As the Oregon Studies evolved it became evident that outputs could be categorized in terms of a number of variables. Among them are (a) Structure (product, event, or condition), (b) Function (policy setting, management, or production), (c) Character (knowledge, technology, implementation, or information), and (e) Stage of Completion. These five schema are represented in Table 20 for each project output identified, with frequencies summarized for each category. Table 20 has been added to this profile subsequent to the profile's original writing.

TABLE 20

Classifications of Output Characteristics

Project Outputs		Output Characteristic[a]																		
		Structure			Function			Level			Character (Products only)				Completion Stage					
No.	Label	p	e	c	pe	m	p	f_1	c	f_2	k	t	i_1	i_2	1	2	3	4	5	6
P-01	Site Assessment Criteria	x					x			x		x				x				
P-02	Site Selection Criteria	x				x				x		x				x				
P-03	Validation Criteria for Data Collection	x				x				x		x				x				
P-04	List of Scheduled Sites	x				x				x				x		x				
P-05	Approved List of 45 Exemplary Reading Programs	x				x				x				x		x				
P-06	List of Six Additional Reading Program Visitation Sites	x				x				x				x		x				
P-07	Observation Techniques	x					x			x		x				x				
P-08	Site Visit Checklist	x				x				x		x				x				
P-09	Site Visit Schedule	x				x				x		x								x
P-10	Team Rotation Plan	x				x				x		x				x				
P-11	Prepared Questions	x					x			x		x				x				
P-12	Telephone Interview Questions	x				x				x		x				x				
P-13	Team Training Procedures	x				x				x		x				x				
P-14	List of 34 Additional Sites in Childhood Learning Programs	x				x				x				x		x				
P-15	Data Collection Protocol	x					x		x					x				x		
P-16	Twelve Audio-visual Presentations (Descriptions) of Exemplary Sites	x					x		x				x					x		
P-17	Detailed Descriptions of Childhood Learning Programs	x					x	x					x					x		
P-18	Brief Reports of Childhood Learning Programs	x					x	x					x					x		
P-19	List of Ranked Sites	x					x	x						x					x	
P-20	Detailed Descriptions of Exemplary Reading Programs	x					x	x					x					x		
P-21	Brief Reports of Exemplary Reading Programs	x					x	x					x					x		
P-22	Guidelines for Site Visits	x				x		x				x						x		
P-23	Program Descriptions	x					x	x					x					x		
P-24	Final Report	x					x	x						x					x	
C-25	Staff Awareness			x		x				x										x
P-26	Refined Product Report Specifications	x				x				x		x				(1)	x			
C-27	Compatible Work and Expenditure Rates			x		x				x										x
C-28	Compatible Time-People Relationship			x		x				x										x
C-29	Comfortable Decision-making Structure			x		x				x										x
C-30	Quality Products			x		x				x										x
E-31	Work Assignment		x			x				x										x
C-32	Efficient Manuscript Processing			x		x				x										x
Classification Frequencies[b]		25	1	6	0	20	12	8	2	22	0	12	6	7	0	13	1	8	2	8

[a] The specific output characteristics are identified as follows:

Structure	Function	Level	Character	Completion Stage
p - product	pe - policy setting	f_1 - focal	k - knowledge	1 - completed over one year ago
e - event	m - management	c - component	t - technology	2 - completed 3 to 12 months ago
c - condition	p - production	f_2 - facilitating	i_1 - implementation	3 - completed within last 3 mos.
			i_2 - information	4 - currently in progress
				5 - not yet underway
				6 - on going (continuous)

[b] Data totals in this table may vary slightly from data in tables reported elsewhere. This is a function of decision rules governing classification of outputs having been revised and applied to these data subsequent to the preparation of the profile.

Chapter VI: Project Dynamics

The majority of the personnel who launched the Exemplary Reading Programs Project had been engaged in various phases of Project PLAN (a learner-responsive education system planned in accordance with needs for beginners in elementary schools through the twelfth grade), which was returned to Westinghouse Learning Corporation after being a major undertaking of AIR for several years.

In all, six of the original project staff were gone from the project by the time the interviewing team visited AIR. During the early stages of the project these persons did a great deal of the interviewing. As these former PLAN staffers departed they tended to be replaced by persons who had backgrounds in writing and editing. At the time of visitation three writer-editors and an editor were working on the project.

The coordination of the project had three phases. For the first six weeks a temporary Project Coordinator had the responsibility of determining the qualifications of potential sites and of training and scheduling interviewers. Then a senior research scientist was assigned to the project and, for the most part, took over these responsibilities. Finally, the present Project Coordinator was brought in to replace the senior research scientist (who left AIR) and this person was assisted by the Project Coordinator until familiar with the operations of the project and its personnel.

In spite of these changes it did not appear that there had been any marked disruption in progress. Apparently changes in personnel were handled rather easily by the Project Director and other administrators at the agency.

Interrelationships Among Director and Staff

The interviewing team was impressed by the influence of the Director upon the staff. It is probably fitting that a few of his statements regarding his relationships with the project's personnel be given. With regard to financial matters, he was emphatic that these be restricted to his attention and that of the financial specialist of his program. "My function as an administrator," he asserted, "is to determine whether the normal rate of movement of the organization is going to get the job done. If not, we'll sit down and see what needs to be done. I want my staff to work 100% on intellectual input and not be concerned with financial problems. I want my research people to maximize their time and effort to the intellectual problems involved and not the financial problems."

Interrelationships Among Project Personnel

Communications among the persons engaged in carrying out the project functions and tasks appeared to be easy and informal. None of these people, it seemed, worked for each other. Instead, they acted more as if they worked for the Project Director while working with one another in an apparently easy and constructive way. The Director's presence is everywhere in the project, and each person feels the Director is aware of what that person is doing.

Some people working on the project are primarily interviewers and some are primarily editors and writers, but all project personnel are expected to go on site at least once. It has developed that some people who went out were better suited for interviewing and others were better suited for writing, and so several of the two-man teams have established a kind of division of labor--one person is responsible for the writing and the other is expected to do most of the interviewing. Reliability checks for interviewers are found in the corroboration obtained between the two members of a team and the system of rotating team members. Several persons are considered to be editors and writers, interacting with an editorial specialist.

Interrelationships Among Other AIR Personnel

The proposal for the project was the work of four persons. Their involvement with the project ceased after the proposal was written and accepted (with the addition of the White House Conference reports which were appended to the Exemplary Reading Program reports).

One senior person, who had been the Project Director's assistant on Project PLAN, had a good deal to do with scheduling site visits and coordinating personnel for a short period during the initial stages of the project. Another senior person was also involved for a while in the project, although he did not work full time on it. His participation was also limited to the early stages. In general the working relationships among the contractor's projects are such that people are occasionally "borrowed" for brief periods of time in order that certain tasks can be completed.

Apparently the relationships among project personnel and the agency's support personnel are good. The persons working on the project have few problems in obtaining clerical, secretarial, or bibliographical assistance. As far as could be determined, the materials and equipment needed for carrying out the project were available to all project staff members.

Interrelationships Among Project and Parent Agency

Although financial reports from the agency headquarters in Pittsburgh are sent to the Project Director regularly, they usually are about 30 days behind current figures. Therefore the project's accounts (and the accounts of the other projects in the Director's program) are kept in Palo Alto.

With respect to the recruiting of personnel, if people are needed the Director looks within AIR first. If people with the desired qualifications are not found in the agency, he then goes outside of it. Persons may be transferred from one project to another in an informal fashion (as happened several times during the history of this project). Since AIR classifies people according to salary, people from other projects can be brought in at the same salary (and no one is concerned about hiring people away by offering them higher salaries). Occasionally outside manpower is hired on a temporary basis to get particular jobs done.

Interrelationships with the U.S. Office of Education

A considerable amount of interaction takes place (usually by means of the telephone) between the Project Director and the USOE Project Monitor and his assistants. The Project Director attempts to intercede when demands made upon project staff appear to him to be unreasonable or when clarification of certain procedures is necessary.

Quite frequently, the Editorial Specialist of the project also interacts with USOE editors in Washington, D.C. Problems of style, length, content, and the like are negotiated by telephone and letter.

Technological Resources Used by Project Personnel

Except for an onsite computer and a remote computer terminal, the technological resources available to the project staff were quite complete. Five of the interviewees responded to a questionnaire on support resources. They indicated that only a few of these resources were essential for the successful completion of their tasks on this project. All of them indicated that the typewriter was necessary, four staff members stating that they themselves typed. Only one interviewee indicated that dictating equipment was necessary, although two staff members actually used it. Similarly, only one person felt that the calculator was needed for the tasks required of her, but she did not actually use that piece of equipment. For the purposes of this project the interviewees felt that a keypunch machine, a data-card sorter, a remote computer terminal, an onsite computer, and a video tape were unnecessary. On the other hand, all except one person believed that a research library was essential for the successful completion of tasks; four persons used the library, and two required support staff to utilize its resources. Four of the five interviewees thought that duplication equipment was necessary; three of them used it, and four of them required support staff to use duplication equipment.

Support Resources Used by Project Personnel

The interviewees were unanimous in seeing a need for a typing pool, and all except one used the support staff to have typing done. On the other hand a stenographer was not seen as essential by four of the interviewees although stenographic services were apparently available. Three of the interviewees felt that a file clerk was essential for the purposes of the project, and four persons evidently availed themselves of the services of filing clerks. No one stated that either a data-processing clerk or a computer programmer were necessary. Two persons felt that an audio-visual specialist was needed, and one of these made use of such services. Only one interviewee felt that a graphics specialist was needed, but no one called for this type of service. (Actually, most graphics and other audio-visual services were supplied to the project by two subcontractors.) One person thought that a library research specialist was essential to the project's success, and this person apparently made use of agency librarians. Three persons believed a printer to be necessary, and these three also used such services.

Chapter VII: Implications For Training

The suggestions offered by the interviewees as to training personnel for the functions and tasks involved in similar projects were generally along two lines of thinking. To begin with, the interviewees were impressed with the importance of being able to write in an objective but readable fashion. To be able to do this, they felt that project personnel should be familiar with--but not necessarily expert about--research design, testing, evaluation, basic research reference works, statistical terms, and modern trends and materials in education. The second type of suggestion had to do with personality variables. It was believed that project personnel should possess listening skills, to allow effective interviewing. Ideally, these persons should be personable, mature, companionable, willing to travel, and sensitive to others (being able to project into another's role).

These are just about the kinds of suggestions that might be expected of individuals who interview people and write objective, quasi-technical reports. A significant finding was that writing skills are quite important. There are many kinds of writing required of educational research, development, diffusion, and evaluation personnel, however, and so it seems logical that in hiring people to take jobs in projects which engage in these activities it would be well to determine if the applicants have the specific writing skills required of the positions.

The specific responses made on our questionnaire by the interviewees to questions about job qualifications and preservice training were consonant with the responses given during the interviews when training suggestions were elicited. Two of five respondents felt that their jobs required a master's degree. Interestingly enough, the degree actually held by the respondent was not necessarily the one which that person believed to be a requirement for holding his position. For example, one person holding a master's degree felt that a bachelor's degree was sufficient, and one person holding a bachelor's degree felt that it was necessary to have a master's degree to perform the functions and tasks required.

The knowledges and skills which the interviewees perceived as being necessary for carrying out the positions of project coordinator, interviewer, administrative assistant, and editorial writing specialist were nearly identical to the ones which they recommended for formal preservice training. These can be grouped under two headings: technical training and general training. These were their suggestions for training dealing with technical knowledges and skills:

1. Knowledge of research design.
2. Knowledge of testing and evaluation.
3. Knowledge of the purposes and regulations of government-funded projects.
4. Knowledge of the terminology used in reading programs.
5. Knowledge of the equipment used in reading programs.

6. Knowledge of research approaches in the teaching of reading.
7. Skill in journalistic writing.
8. Skill in editing formal reports.

These were the suggestions given for training of a more general nature:

1. Skill in administration and supervision.
2. Skill in writing.
3. Skill in interviewing.
4. Knowledge of relevant education courses.

There was some difference of opinion among the interviewees as to whether or not a great deal of experience was necessary in carrying out their jobs. In general, they felt people holding their jobs should have from one to five years experience in research, development, evaluation and/or diffusion. They were less in agreement with regard to the administrative experience needed to carry out the functions and tasks of their positions. One person believed five or more years was necessary, two felt that one to five years was required, and two felt that less than a year was sufficient.

With such a small number of persons to generalize from, these findings are interesting but in no way conclusive. They are useful only from the standpoint that this particular group of individuals, engaged in the tasks of a project which was evaluative in nature, agreed upon the importance of various skills of writing and interviewing as being all important in bringing their project to a successful conclusion.

From the recommendations of the interviewees it would seem that some training in the writing of reports or other papers would be most desirable for individuals who work in educational research, development, diffusion, and/or evaluation. Of the various types of experience which might have prepared the interviewees for their present experience with the agency, previous experience in research, development, diffusion, and/or evaluation work were prominent. The implication is that the critical ability to write is generally present in the individual before he becomes part of the project staff, and it is therefore an ability that should be looked at carefully before most persons are assigned to educational research, development, diffusion, and/or evaluation projects.

A GUIDE TO THE OREGON STUDIES IN EDUCATIONAL RDD&E

Volume I

SUMMARY REPORT

An introduction to and overview of the Oregon Studies as a whole. The volume contains an outline of the history of the Studies, the rationale around which they were designed, the context within which they were carried out, and the procedures followed in their execution. It also contains a description of the projects selected for study, the rationale underlying their selection, the criteria and procedures used in their selection, and an overview of the data collected on each project. Finally, the volume contains an introduction to the "case profiles" that house the data collected on each project, the results of all cross-project analyses, and the summary recommendations that have been made relative to training and the continued study of educational RDD&E activities. A brief description of the case study methodology developed within the Studies, an overview of a process whereby investigators may query computer-stored data files and original interview statements to obtain information bearing upon specific questions relating to training, manpower, policy, and work performance, and supporting data accompany the volume.

Volume II

THE LITERATURE OF EDUCATIONAL RDD&E

A compendium of existing literature that defines, describes, differentiates, or relates the activities labeled educational research, development, diffusion, evaluation, and various combinations thereof. The articles within the volume are introduced as a collection. Linking passages provide an interpretive context both for individual articles and for the sets into which they have been grouped.

Volume III

CONCEPTUAL FRAMEWORKS FOR VIEWING EDUCATIONAL RDD&E

A collection of papers which provide the conceptual underpinnings to the Oregon Studies. It contains three papers commissioned by the Studies as a basis for conceptual development, and a paper by staff from Teaching Research that describes the conceptual frame that guided and grew with the empirical thrust of the Studies. Each of the papers is a major document which defines, differentiates, and relates one or more facets of educational RDD&E and provides a supporting rationale for the position adopted. Each paper is accompanied by a formal critique, and the set of papers is accompanied by an introductory and summary critique.

Volume IV

PROFILES OF EXEMPLARY PROJECTS IN EDUCATIONAL RDD&E

A collection of twenty case profiles that form the data base in the Oregon Studies. Printed in three parts, the profiles describe five research projects, seven development projects, three evaluation projects, and five diffusion projects. Each profile contains descriptions of the structure and function of the project being analyzed, the specific outputs expected to emerge from it, the operations required to produce each output, and the knowledges, skills, and sensitivities judged to be essential to the performance of those operations. In addition, each profile contains sections dealing with the "dynamics" of project operations and implications that derive from the project for preservice staff training. The projects described range from small, two-man efforts within university settings to very large school district "projects" employing several dozen staff members. Eighteen of the twenty projects described were judged to be illustrative of the kinds of RDD&E activities likely to occur within the context of education in the future. The twenty projects account for analyses around 298 project outputs and interviews with 134 professional staff members.

Volume V

A METHODOLOGY FOR THE STUDY OF EDUCATIONAL RDD&E

A detailed description of the most refined form of the data collection methodology developed within the Studies, directions to guide its use, and the decision rules needed for the volume to function as a users manual. The volume includes information on procedures used in site contact, site preparation, data reduction and analysis, and profile preparation. It also includes information on the category sets used in data reduction and the computerized data files that contain or provide access to all data collected in the Studies.

Copies of any or all of these volumes
may be obtained at cost from
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